DOCUMENT RESUME

ED 332 278 EA 022 246

TITLE	What School for Africa in the Year 2000? Report of the Proceedings of the Pan-African Conference on Education (Yaounde, Cameroon, April 2-9, 1984).
INSTITUTION	World Confederation of Organizations of the Teaching Profession, Morges (Switzerland).
PUB DATE	Apr 84
NOTE	196p.
PUB TYPE	Collected Works - Conference Proceedings (021) -- Reports - Evaluative/Feasibility (142)
EDRS PRICE	MF01/PC08 Plus Postage.
DESCRIPTORS	*Cooperation; *Developing Nations; *Educational Change; *Educational Development; *Education Work Relationship; Elementary Secondary Education; Foreign Countries; Higher Education
IDENTIFIERS	*Africa

ABSTRACT

The Pan-African Conference on Education was organized by the World Confederation of Organisations of the Teaching Profession, with the cooperation of UNESCO and many other groups. The conference invited representatives of teacher organizations and education ministries in both English- and French-speaking African countries. Of the 26 African countries invited, 23 attended. The conference had three objectives: (1) to create a cross-fertilization of ideas on projections of educational prospects, practices, and methodologies for African schooling in the year 2000; (2) to synthesize recommendations of the Kampala and Niamey Conference in line with all the relevant UNESCO conference declarations and recommendations; and (3) to bring together African educators in both policy-making and practitioner sectors to foster a spirit of cooperation in policy formulation, planning, and execution of educational programs. After four welcoming addresses by educational leaders, the keynote address "What Must the African School Be in the Year 2000?" was presented by M. Souleymane N'Diaye, a representative of the Director General of UNESCO. The emphasis was on the kinds of cultural and moral lessons necessary for making a person useful in society. This presentation was followed by declarations and recommendations from past conferences and by three panel discussions and numerous other papers. Opening and closing speeches are also appended. (MLH)

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Mondiale des Organisations de la Profession enseignante
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PANAFRICAN CONFERENCE ON EDUCATION

"What school for Africa in the year 2000?"

Yaounde, Cameroon 2 - 9 April 1984

World Confederation of Organizations of the Teaching Profession
5, avenue du Moulin, 1110 Morges, Switzerland

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The drawing on the front cover is by courtesy of the "Syndicat des Enseignants Laïcs de Togo".

INTRODUCTION

The Conference at Yaounde (Cameroon) is the synthesis of the two successive conferences organised by the WCOTP at Kampala (Uganda) in 1980 for the English-speaking countries of Africa and at Niamey (Niger) in 1981 for the French-speaking ones.

We invited to Kampala representatives of teachers' trade-unions and professors from teacher-training colleges. At Niamey, we brought together representatives of ministries of education and of teachers' trade-unions. The experience proved positive, and accordingly we decided to invite to the Yaounde conference representatives of governments and of teachers' trade-unions to pursue the necessary and indispensable dialogue for achieving any school reform in Africa with a view to preparing the school of the year 2000.

In organising these conferences, the WCOTP hopes to have made its modest contribution to reflection on the development of education in Africa. In no way does it wish either to dictate or to impose its views on our African colleagues. Its desire is simply, in the context of the solidarity that unites all its members, to offer them a forum in which to express their ideas on the best means of changing the African school and making it an authentic and human instrument of development.

It may seem unrealistic to speak of the African school of the year 2000 having regard to the unsatisfied needs for aid and support of the African school today. We do not share this view, because any valid school reform takes time to be implemented. It must pass through certain essential stages if its objectives are to be achieved: reflection, planning, experimentation, application and generalisation. All this takes time, and only fifteen years remain between now and the year 2000.

The African peoples are currently in a difficult situation. Ignorance, disease and famine are threatening their very existence, their sovereignty and their independence. The school of today, inherited from the colonial period, has not been able to solve these problems. In many cases, because of its unsuitability, it has even worsened them. At Kampala, at Niamey as at Yaounde the message has been clear and specific: the African school must be transformed so that Africa can effectively take in hand its own destiny and development.

WCOTP greatly appreciates the cooperation and support it has received from all those who have contributed to the organisation and success of the conference, inter alia the government of Cameroon which showed so much understanding and generosity during the unfortunate events of 6, 7 and 8

April, Unesco and in particular its Director-General, Mr. Amadou-Mahtar M'Bow, BREDA, the Swiss Federal Department for Cooperation, our colleagues and friends from IFTA, FIPESO, the Canadian Teachers' Federation, SNI-PEGC, Sweden's LO/TCO, the Société Pédagogique Romande of Switzerland and the All African Teachers' Organisation whose President, Dr. Joseph O. Itotoh and Secretary-General, Tom A. Bediako, have given us invaluable cooperation at Yaounde.

It would be unrealistic on our part to believe that three conferences alone could suffice to resolve the grave and urgent problems of education for the peoples of Africa. Our aim and hope is simply that those who were present at Kampala, at Niamey and at Yaounde and who are now back in their respective countries will continue their reflection on the themes studied and propose concrete actions in order to transform the African school and prepare that of the year 2000 in optimum conditions.

This reflection can and must continue at national level in the dialogue between governments and teachers' trade-unions and all other organisations having an interest in the matter, in the course of study days, symposia, seminars and assemblies of the education world.

Our most ardent desire is to see become reality the principal wish expressed by the teachers and government representatives who met at Niamey - namely a meeting at the highest level, i.e. a meeting of the Heads of State of all the countries of Africa to take in hand decisively the future of education.

James W. Killeen	Norman M. Goble	Kléber Viélot
President	Secretary General	Conference Coordinator

PAN AFRICAN CONFERENCE
WHAT MUST THE AFRICAN SCHOOL BE IN THE YEAR 2000?
Yaounde, United Republic of Cameroon
2-7 April, 1984

PROGRAMME

April 1	Excursion
April 2	
09.00 - 10.30	Opening Session - M. Metou Nkoum Daniel, Président de la Ligue Camerounaise de l'Enseignement et de la Culture Populaire (LCE) - Dr. Joseph Itotoh, President of the All African Teachers Organisation (AATO) - M. James W. Killeen, President of the World Confederation of Organisations of the Teaching Profession (WCOTP) - M. Hele Pierre Minister of Education, Cameroon
	BREAK Setting up of the Conference office
11.00 - 12.30	Speech by M. Souleymane N'Diaye, Representing the Director General of Unesco What Must the African School be in the Year of 2000?
15.00 - 16.30	3 presentations: Revue of declaration and recommendations: - Lagos and Harare (BREDA - A. Gnali) - Kampala (OPAPE/AATO - T. Bediako) - Niamey (by the Niamey rapporteur)
	Group Work
17.00 - 18.30	Plenary Session - reports from the groups

April 3

09.00 - 10.30	Panel I - Present state of democratisation and universalisation of education in Africa Viewpoint: English-speaking Africa, Zimbabwe Bilingual Africa, Cameroon An international governmental organisation, Unesco
11.00 - 12.30	Group Work - Plenary Session
15.00 - 16.00	Case study on the theme: Problems posed by the teaching of national language Comparison of four situations: - Burundi - Mali - Kenya - Zambia
17.00 - 18.30	Discussions

April 4

09.00 - 10.30	Speech by Professor P. Obanya, University of Ibadan, Nigeria, Problems of relevance of the African school and university programmes
11.00 - 12.30	Group work - Plenary Session
15.00 - 16.30	Panel II : The role of scientific and technological education in the African school Panel participants: - 1 Governmental representative, Cameroon - 1 Teachers organisation representative, Uganda - 1 Representative of African workers, AATO
17.00 - 18.30	Plenary Session

April 5

09.00 - 10.30	Panel III : Educating teachers in view of "interaction, education and productive work"

	Panel participants: - 1 representative from an English-speaking country, Tanzania - 1 representative from a French-speaking country, Congo - 1 representative from Unesco
11.00 - 12.30	Group Work - Plenary Session
15.00 - 16.30	Intervention : Human and financial, resources necessary for education its democratisation and universalisation by Professor P. Obanya
17.00 - 18.30	Discussion
April 9	Morning free
16.00	Closing Ceremony

SYNTHESIS OF THE CONFERENCE

The Pan-African Conference on Education was held in Yaounde, Republic of Cameroon from 2 - 9 April 1984, at the Palais des Congrès, and was organised by the World Confederation of Organisations of the Teaching Profession, in cooperation with the government of the Republic of Cameroon, and the All Africa Teachers Organisation with the aid of Unesco, CTF, DDA and SPR of Switzerland, FIPESO, IFFTA, SNI/PEGC and the LO/TCO. The theme of the Conference was "What Must the African School be in the Year of 2000?"

The Yaounde Conference invited representatives of teacher organisations and Ministries of Education in both English- and French-speaking African countries.

Invitations were extended to 26 African countries out of which 23 were present. 21 teacher organisations, two non-governmental organisations Unesco/BREDA and APAPE/AATO, and three international teacher organisations were also present.

The objectives of the Conference were threefold :

- to create a forum for cross-fertilisation of ideas on projections of prospects, practices and methodologies for education on Pan African basis in the year of 2000;
- to have a consensus synthesis of recommendations of the Kampala and Niamey Conferences in line with all the relevant Unesco conference declarations and recommendations in the light of reason and experience and offer recommendations to facilitate the achievement of the objectives for the African School in the year of 2000;
- to bring together African educators in the policy making and planning sector of government on one hand and education practitioners through teacher organisations on the other hand to an understanding that they are both fostering the spirit of cooperation in policy formulation, planning and execution of educational programmes.

The Conference was opened at the Palais des Congrès by the Honourable Minister of Education of the Republic of Cameroon Mr. Hele Pierre. Four addresses were delivered by the President of the Ligue Camerounaise de l'Enseignement de l'Education et de la Culture Populaire (LCE), Mr. Metou Knoum Daniel, the President of the All Africa Teachers' Organisation (AATO), Dr. Joseph Itotoh, the President of the World Confederation of Organisations of the Teaching Profession (WCOTP), Mr. James W. Killeen and the Honourable Minister of National Education of Cameroon, Mr. Hele Pierre.

In his address, the President of the Ligue Camerounaise de l'Enseignement et de l'Education et la Culture Populaire (LCE), Mr. Metou Nkoum Daniel welcomed all participants to the Conference. He expressed his happiness that such a historic conference was being held in the Cameroon and thanked all bodies and organisations whose generous contributions made it a reality. He hoped that the Conference would come out with meaningful recommendations for education in Africa for the year 2000.

In his address, the President of the All Africa Teachers Organisation (AATO), Dr. Joseph O. Itotoh welcomed the delegates to the Conference. He was happy with the cooperation between the WCOTP and AATO that has culminated in the holding of the Pan African Conference on Education in Yaounde. He emphasised that AATO was willing and ready to cooperate with all other well-meaning organisations seeking to aid the educational development of Africa without strings. Seeing education as an instrument par excellence for national development, he enjoined all governments in Africa to re-order their priorities withing the constraints of prevailing economic hardships to give adequate attention to education. He called on all governments and governmental organisations to take teachers into confidence always in policy making, planning and execution of education programmes for Africa.

In his address, Mr. James W. Killeen, the President of WCOTP welcomed delegates to the Conference. He expressed the pleasure of WCOTP to be instrumental in running the Conference. He re-affirmed the WCOTP principles of action, not imposing any ideas on any member or non-member organisation or country, but rather striving to cooperate with the people to develop within the confines of their national and or/organisational aspirations. He wished the Conference, in which he would be present as an observer a great deal of success.

In his address, Mr. Pierre Hele, the Minister of Education of the Republic of Cameroon, welcomed all the participants and thanked WCOTP for choosing Cameroon as site for this important international meeting on education, and for its moral, technical and financial contribution to African countries. He also thanked OPAPE and Unesco.

The programme of work for the week comprised two distinct parts.

A. Conferences following by debates.

B. Panels following by works in groups allowing participants to exchange experiences and to make proposals.

I. Keynote address by M. Souleymane N'Diaye, representing the Director General of Unesco.

"What must the African School be in the year 2000?"

He held that for education to ensure economic reliance, it must be geared towards the improvement of the standard living of mankind. The school of tomorrow must ensure special strategies which will ensure self-sufficiency in food production, must teach population education, health education, science and technology.

Education must teach culture, moral ethics and all that makes a man useful in the society. African culture must be promoted. Consideration must be given to eradication of illiteracy. The teaching of national languages in schools must be encouraged. Local crafts could also be taught in local languages serving as introduction to technology. Education should be geared towards productive work. Unesco has been assisting in this area. Unesco organised a seminar in Dakar in 1983 on "Education and Productive Work". Efforts should be intensified to use school gardens as the starting base for agriculture.

African languages should be used as a vehicle for national unity. The research commissioned by Unesco has proved that national languages could be successfully used as a means of teaching. Local languages could be best used for teaching or describing duties of the blacksmith, fisherman, etc. The child can think better and express himself better in the local language.

The school of tomorrow must consider many things to ensure healthy and happy life such as the use of free time, family size and culture. Such a school must make use of mass media for education such as the radio, television which would make teaching effective. At the national levels we must invest enormously in the training of teachers and the utilisation of in-service programmes.

Africa should not continue to import tools when children are to be taught locally. Development must be based on the environment and there must be uniformity of training and not necessarily copying others.

Management of schools must be flexible. There should be room for stimulation without prejudice to appreciable levels of standard being set. Teachers should be given a free hand to manage schools. School materials, building and pedagogy should be adopted to the environment.

Universities should organise researches. Many countries are in danger of lack of manpower because those trained in the universities could not be employed because of the type of training they had. Instead of employing local people, technicians are consequently being imported. Universities should direct their orientation towards productive work.

Education of women should be given more attention. As at present, more than 70% of illiterates in Africa are women. Female peasants could do better socially and economically if educated.

II. Review of declarations and recommendations

From Lagos and Harare:

The representative of BREDA, Mrs. Gnali commented on the role of Unesco in organising series of regional conferences in Africa to examine problems of education. Past conferences were held in Addis Abeba in 1961, Abidjan in 1964, Nairobi in 1968, Lagos in 1976 and in Harare in 1982.

Unesco has also in the past cooperated in organising seminars on topics like:

- democratisation of education and educational innovation;
- educational campaign against illiteracy;
- education of women;
- international cooperation in education;
- pre-school education - objectives and development;
- the use of national languages in schools;
- endogenous development, improvisation of local materials.

Mrs. Gnali maintained that Africa must cooperate in Higher Education since they have cultural identity. They must cooperate in research work and weaker countries should be assisted by stronger ones. She also advocated for international cooperation with African governmental and non-governmental organisations to ensure adequate training and research.

From Kampala:

Mr. T.A. Bediako, Secretary General of All Africa Teachers Organisation presented the Kampala Conference Reports. He summarised the reports under the following recommendations made to governments, professional bodies, teachers, inter-governmental and non-governmental organisations:

- relevance of educational system;
- curriculum development - taking into account vocational needs, environmental education and family life education;

- language policy;
- women and education;
- teachers' participation in decision-making;
- regional coordination by professional bodies.

Mr. T.A. Bediako highlighted some problem areas, such as:

- dissemination of information;
- instability of politics in Africa;
- the essence of manual labour in schools;
- financial handicap for professional development.

From Niamey:

Mr. Ekoue Kouvahey presented the Niamey conference report and underlined several points. He emphasised that traditional education was a coherent system which, in spite of its limitations, could very well serve as a source of inspiration for the re-shaping of the school system.

He reported that resistance to change must be examined in detail and must be overcome, chiefly by concerted effort, the dissemination of information and by the assumption of responsibility on the part of the people themselves.

The components of the strategy to be implemented are the following:

- changing the society;
- transforming the schools into community units of teaching and production;
- changing attitudes;
- developing research;
- using of national languages in teaching;
- scrupulously preparing the changes.

III. PANELS

Panel discussion on the topic: Present state of democratisation and universalisation of education in Africa

Viewpoint of Zimbabwe
Mr. B.J. Chimbunde

From Zimbabwe's point of view, the history of situation in Zimbabwe shows that the blacks were not educated alongside with the whites. Their culture was adulterated.

In 1977, there was expansion in schools coupled with recruitment of untrained teachers. Opportunities of education were not afforded the blacks but more money was expended on the whites. This kept the blacks seriously disadvantaged.

As for universalisation of education, primary education is now free in Zimbabwe and education is made available to all. There is a campaign against illiteracy. Among the problems now encountered are the lack of finance and the need to gear education towards self-reliance.

Viewpoint of Cameroon

As for Cameroon, education for unity is the main issue in the country at present. Though there is a population explosion resulting in increase of enrolment in primary schools, the government is trying to ensure quality education for all. The Ministry of Education makes provision for curriculum development centres and educational research centres.

Pre-primary education is only available in major towns and these are basically privately owned.

Viewpoint of Unesco
Mrs. M.A. Gnali

Considering democratisation and universalisation of education in Africa, primary education objectives proposed in Addis Abeba were not realised because of the population explosion. There were no statistical data before the proposals were made. Only one-third of the continent has reached 50% of the target while 19 countries has attained less than 50%.

The major constraints were the population explosion, limited sources and the high cost of financing education. There is also the case of nomadic population vis-à-vis the urban population. The Unesco's solution is based on structural reforms, bearing in mind pupil-teacher ratio and improvisation of buildings and equipments. It was also suggested that oral education should be used, its role in education being the elimination of discrimination.

Case study on the theme : Problems posed by the teaching of national languages

Four experiences

1. Mali's submission:
   The Conference was informed that Mali has the problem of pedagogy in the French language. As the language is foreign there is a lot of difficulty in making the introduction in schools. Pupils express themselves better in their national language. It is difficult to assess the quality of the foreign language through its usage in schools. National language should be developed but there is the problem of resources.

Bilateral and multilateral cooperation should be sought to develop national languages.

2. Kenya's submission:
   It was disclosed that Kiswahili has been adopted as a national language in Kenya, this has equally been accepted by the neighbouring countries. It was also recalled that AATO has previously unanimously agreed that Hausa and Swahili languages should be accepted as Pan African languages. Africa has been urged to take immediate action.

3. Zambia's submission
   In Zambia, national languages are taught at school, books are written in the national languages: the teaching in and of the language is no major problem as constant effort is being made to improve the situation.

4. Burundi's submission:
   Burundi has made progress with the use and teaching of/in local language. There is only one national language in Burundi. This is used with French as the official language in the country.

Paper on : "The Problem of Relevance of the African School and University Programmes"

Presentation by Professor P.A.I. Obanya, University of Ibadan, Nigeria

Mr. Obanya first examined the concept of RELEVANCE from its philosophical, physical and psychological dimensions and related them to practical considerations in the African school context. He saw a school programme as being conceived as a dynamic process of engineering, installing and monitoring teaching-learning opportunities. The paper went to examine modern concepts of education in Africa as well as the content, methods and materials for the delivery of education. The presenter saw most present day national policies on education in African countries as policies on schooling, not on education. African countries should seek relevance in conceiving education in its best sense of taking care of the development of the three "H's" of the individual (the Head, the Hands and the Heart), as a means of an integrated development of society.

At the end of his lecture in which he pointed out several issues of irrelevances in the African school system, Professor Obanya suggested that more work be done to ensure that education in Africa in the year of 2000 will be more relevant to the needs of the African child.

Professor Obanya also made the following recommendations:

- that university work should be creative. The quality of the school should be improved to make it a functional agent of change;
- that the use of African languages for teaching and learning should be intensified;
- there should be documentation of African languages to make them more functional;
- that literature courses at all levels of education should emphasise its universality, as every community uses its language for creative purposes in the form of poetry, drama and prose;
- interpretations of key concepts in social sciences should be examined and made relevant to African environment;
- that stereotypes in the teaching of human geography in Africa should be removed and current developments emphasised;
- local programmes should be developed based on indigenous technology;
- African traditional religion should be given due prominence in school programmes;
- programmes on teacher education should become more relevant at all levels;
- efforts should be made to produce educational materials locally.

Panel discussion on the topic : Role of Scientific and technological education in the African School

Viewpoint of Cameroon

The emphasis should be placed on the teaching method. At the moment, they make use of auxiliary teachers in technology education. Experiments are therefore necessary for successful teaching as well as the design of suitable teaching aids, realising the importance of functional equipment in undertaking effective teaching.

Viewpoint of Uganda

Uganda traced history of its educational development through the years to date. At present, the teaching of technology has been introduced in schools. Clear cut policies on education are formulated. There is vocational education in the formal and non-formal educational system.

Viewpoint of AATO

In AATO's intervention, the Secretary General, Mr. T.A. Bediako wondered why there still is unemployment and lack of food in Africa after about 20 years of independence. Instead of productive work Africa is mainly concerned with consumption. The main problem in Africa was caused by lack of technological orientation. In primary school little attention is devoted to gardening, there is no premium placed on nature study and agriculture. Some teachers even ask students to do manual work as punishment, thereby reducing the value of manual work. Africa must plan well how to finance technical education. Everybody must be involved both in the planning and execution of the programme for technology education both in the formal and non-formal setting.

Panel discussion on the topic : Educating teachers in view of interaction, education and productive work

Viewpoint of Tanzania

Whatever the changes are in Africa, we must take into account its social and economic needs. Africa will mainly depend on agriculture in the year 2000. Schools must attach importance to this sector. There should be cooperative development in Africa and education must prepare young people for productive work. Whatever we do in educational innovation, must be geared towards self-reliance. Curricula must be modified.

Viewpoint of Congo

Education should enable pupils to participate with others in developing rural areas and cooperate with others in economic services. There is a need for general education. As the choice of pupils for teacher education is important, there should be competitive examinations to select student teachers. The duration of training should be adequate and in-service training should be organised by the teachers.

Viewpoint of Unesco

Unesco believes that productive work does not mean manual work. There should be a good orientation towards productive work. Children's negative attitude should be changed and directed towards the advantages of productive work. Teachers should make use of specialists such as carpenters, bricklayers, engineers, etc. Artisans should be given teacher education to enable them to teach their subjects.

Panel discussion on the topic : Human and financial resources necessary for education, its democratisation and universalisation

Viewpoint of Ghana

The emphasis has been put on the lack of sufficiently trained personnel, even if tremendous efforts have been made to meet the need for trained teachers to cope with the unprecedented school enrolment. Many of the experienced and trained teachers have left Ghana for West African countries.

Moreover, the further progress towards democratisation and universalisation of education is hampered by lack of sufficient financial resources, to renovate dilapidated school buildings, provide school furniture, textbooks, etc. To make the teaching of science and technology in the early stages of the formal schooling effective, it is imperative to equip and raise the physical standard of the schools.

Ghana underlines that maximum use has not been made of the education resources. A more rational use of the existing school facilities must be made through shift system, evening classes for adults and vacation sessions for those outside the walls of the schools. Through information, training of personnel, workshops on education WCOTP can help the developing countries to re-shape their educational systems.

Viewpoint of Nigeria

Even if Africa has important human resources, it is equally true that a large proportion of "trained" and "qualified" teachers are in fact not competent. The term "educational personnel" must be re-defined and the professionalisation of teaching vigorously pursued, with the help of support personnel from various areas of national socio-economic activity.

Nigeria notes that a lot of money is wasted on prestigeous projects, and that much could be done by the countries to transfer this money to the educational sector. Moreover, each country could make the financing of its education more rational and limit the "non-educational" activities of Ministries of Education which consumes most of the money voted for real educational activities.

This financial obstacle can be overcome through self-criticism of expenditure patterns and re-ordering of priorities by shifting expenditure from the grandiose and irrelevant to the essentials, getting the well-to-do to invest in education and produce less costly buildings and materials for education. We must get self-reliant and refrain from the "beggar mentality" of relying on donations from abroad.

WORKING GROUPS

The various working groups rounded up their discussions on various aspects of the topics assigned to them. These were collated at the plenary session for further action in the preparation of the recommendations and declarations.

The programme of the Conference envisaged a six-day conference but the turn of events on the 6th of April, 1984 caused by the attempted coup-d'état brought a dismal twist to the events. The blood chilling staccato rattling and booming of guns, winded by low flying military helicopters and planes kept all participants pretty shaken with fear for their personal safety. It is important to comment the spirit of leadership exhibited by Mr. James W. Killeen even in the face of a siege to rally all the WCOTP and AATO executive members and secretariat senior staff of both organisations present to constitute an emergency control committee. The team spirit generated by this control-post action helped in no small measure to sustain the moral and the shock resistance of delegates. It is also important to thank the government of Cameroon for its considerate action in catering for the delegates' accommodation and boarding during the last critical days of the delegates' stay in Yaounde.

In spite of all these events, it is worthy of note that the Yaounde Pan-African Conference on Education was yet another experience in the struggle to establish good international relations and mutual cooperation for educational development all over the world. The outcome of the conference was satisfying. The Yaounde Declaration and Recommendation have gone a long way to map out a realistic blue print for education in Africa for the year of 2000.

World Confederation of Organisations of the Teaching Profession

PAN-AFRICAN CONFERENCE ON EDUCATION
Yaounde, Cameroon, 2-9 April, 1984

Declaration

* * * * * *

1. The Pan-African Conference on Education attended by representatives of African Teachers' Organisations, representatives of Education in Africa, and friendly teachers' organisations from other parts of the world at the generous invitation of the Government of the Republic of Cameroon from 2nd to 9th of April, 1984, solemnly adopted the following declaration.

2. The Conference was able to harmonise the points of views expressed by educators in the English-speaking countries of Africa in Kampala in 1980, and by educators in the French-speaking countries of Niamey in 1981.

3. Coming closely after the historic Conference of ministers of education and those responsible for economic planning for African member states of Unesco (MINEDAF V) held in Harare in 1982, the Pan-African Conference on Education had as its point of departure the vision of those responsible for education as expressed in the recommendations of that historic Conference.

4. The Conference was at one with African Governments in beginning from now to plan a viable education system for Africa in the year 2000, a form of education which will be deeply entrenched in African cultural values while, at the same time opening up opportunities to the child in the ever-expanding world of the twenty-first century.

5. Addressing itself to the theme "What type of education for Africa in the year 2000?", the Conference considered the following subthemes: (a) the present state of democratisation and universalisation of education in Africa, (b) problems posed by the teaching in and of African languages, (c) the problem of relevance of African school and university programmes, (d) the role of scientific and technological education in the African school system, (e) the interaction between education and productive work, and (f) human and financial resources for democratising and universalising education in Africa.

While commending African governments for efforts made on these issues, the Conference urged them to pursue more vigorously their planning and execution at the national level.

6. Problems posed by the world-wide economic recession, national calamities (like drought) and internal economic factors in different countries were duly considered by the Conference. The Conference is in full sympathy with African governments which have had to face serious economic problems.

7. The Conference was also appreciative of governmental adherence to the decision for the development of education taken in Addis Ababa, Abidjan, Nairobi, Lagos and Harare, in spite of the tremendous economic problems currently faced.

8. Intergovernmental organisations (in particular Unesco and UNICEF), as well as various non-governmental organisations in Africa and elsewhere, have aided African governments in their efforts to evolve an educational system which will meet the challenges of the 21st century. The Conference joins African governments in expressing very profound gratitude for their aid; while urging them to channel their future aid to the areas of education of greatest priority to African countries.

9. What is most unique about the Conference was the coming together of the representatives of teachers' organisations from Africa with government representatives. That both groups were able to work together is a strong proof of the confidence which African governments repose on its teachers and their organisations.

Highly encouraged by this cordial relationship, appreciative of the commitment of African governments to the development of a relevant educational system for Africa in the year 2000, and fully aware of the role teachers can play in the development of the envisaged system of education, the Conference:

solemnly affirms the readiness of teachers' organisations in Africa to collaborate fully with African governments in realising the continent's laudable educational goals;

stresses the need for African governments to remain committed to the Harare Declaration and to take appropriate steps to achieve the goals set for African education for the year 2000 by using strategies appropriate to each country's socio-economic realities;

restates the well-known fact that teachers are the most important articulators of an educational programme and calls on African governments to involve teachers in all stages of educational policy formulation, planning and execution;

restates also that not educational system can rise above the quality of its teachers and therefore calls on African government to pursue vigorously programmes of teacher education which should provide for (a) a high level of general education, (b) a high level of professional skills, (c) favourable attitudes towards teaching, (d) a high level of professional ethics, and (e) a well-articulated and well-coordinated programme of continuing education, in order to keep teacher abreast of new developments in education as well as in various disciplines;

expresses its joy at the freedom given to teachers' organisations in most parts of Africa and requests all African governments to reinforce this freedom which makes for a sound development of the mind of the teacher and which will in turn be reflected by the quality of the products of the African school system;

notes the sad situation by which African education has produced more consumers than producers and urges African governments intensify efforts to transform the schools into productive forces which in their turn should develop producers before the turn of the century;

appreciates the effort of economic development agencies to assess the returns of education in Africa but emphasises that the real returns to education are long-term in nature and not easily quantifiable;

gives due recognition to the efforts made so far in Africa to make educational programmes relevant to the needs of the African but calls on the various governments to intensify efforts aimed at:

- enriching educational programmes generally;
- intensifying the development of African languages for use in education;
- intensifying the teaching of science and technology in African schools;
- ensuring closer collaboration between universities and lower institutions in curriculum development;
- forging a closer link between formal, non-formal and informal education;
- gearing research efforts in African universities towards the solution of pressing societal programmes;

- developing low-cost, but effective, technology for education;
- developing and producing teaching-learning material locally;
- relating the content of the various disciplines taught in school, as much as possible, to the environment of the African child;
- promoting teaching-learning methods that lay emphasis on (a) increased classroom interaction, (b) the development of the higher mental processes, and (c) creativity.

notes the intensification of cooperation among the countries of the continent and calls on African governments to further strengthen their financial support for inter-African organisations like the All Africa Teachers Organisation (AATO) and all other organisations working towards the improvement of the quality of education on the continent;

expresses its joy at the preparedness of African teachers to do their best for the development of education in their various countries, even where they have had to work under difficult conditions and calls on all African teachers to show proof of professional conscience at all times, to make use of every opportunity for self-improvement, and to cooperate with their national teachers organisation and national governments in continuously improving the quality of education;

calls on teachers' organisation in all African countries to increase their level of dynamism, both locally and internationally, by (a) initiating appropriate programmes of training for their members, (b) suggesting appropriate strategies for implementing educational policies, (c) readily participating in national activities aimed at developing education, and (d) collaborating with AATO and WCOTP in all their activities;

shows very deep appreciation of the hospitality, as well as the financial and material contributions to the success of the Conference of the Government of the Republic of Cameroon and reassures the Government (and other African Governments) of the readiness of African teachers to play their part in the development of an educational system capable of meeting the needs of African countries in the year 2000;

equally appreciates the contributions of sister organisations in Canada, Norway, Switzerland, France and Cameroon as well as FIPESO and IFTA in making it possible for several participants to be present at the

Conference and calls for continued cooperation between AATO, WCOTP and these organisations;

assures the Director-General of Unesco of the support of AATO and WCOTP in his efforts to help African governments to develop the new-type education envisaged for the year 2000 and affirms the readiness of AATO and WCOTP to cooperate with Unesco in all its activities, particularly and immediately with the "Education for All" programme currently underway.

Made and adopted by the
PAN-AFRICAN CONFERENCE ON EDUCATION
Yaounde, 9 April, 1984

World Confederation of Organisations of the Teaching Profession

PAN-AFRICAN CONFERENCE ON EDUCATION
Yaounde, Cameroon, 2-9 April, 1984

Recommendations

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Recommendation 1

Present State of Democratisation and Universalisation of Education in Africa

The Pan-African Conference on Education held in Yaounde from 2 to 9 April, 1984,

HAVING CRITICALLY	examined the various connotations of the terms "democratisation" and "universalisation" as they relate to education, and
BEARING IN MIND	the solemn commitment of African governments to the ideal of democratisation and universalisation of education as stated from Addis Ababa and Harare, and
RECOGNISING	that "Education for All" is a necessary and suitable means of moving Africa from a stage of underdevelopment with all its ill effects before the year 2000, and
AWARE	that the year 2000 is already "knocking on our door", and
HAVING STUDIED	the efforts made to date to democratize and universalize education in a number of African countries, and
AWARE	of the fact that no African country has as yet attained universal education,

Hereby recommends that:

1.1 access to the first cycle of education be made free (as soon as each country can afford it) in order to facilitate equal access to basic education

1.2 efforts be made to provide varying forms of post-basic education (formal, non-formal, academic, vocational, etc.) to all primary school leavers

1.3 more provisions be made for non-formal education for the out-of-school population

1.4 discrepancies in the quality of educational provisions between different zones (urban/rural, high density/low density areas, etc.) of each country be eliminated

1.5 all social, psychological, religious and other forms of obstacles to the education of girls be eliminated

1.6 sex stereotypes in the content of books, subject and career choices, and classroom activities be reduced

1.7 every effort (local production of curriculum materials, re-ordering of priorities, involvement of local communities in the provision of educational facilities, etc.) be made, as appropriate, to reduce the current high costs of education as a means of facilitating democratisation and universalisation

1.8 appropriate steps be taken to reduce the reluctance of young persons to select teaching as a career in order to ensure the continuous production of qualified and competent teachers and the education of teachers as a continuing process

1.9 traditional and other methods of teaching be used in the formal school system, in order to improve young people's enthusiasm for school work

1.10 the private sector (including multi-national companies) be encouraged to contribute in cash and in kind to the development of education provided such provision does not influence educational policy

1.11 special attention be paid to impoverished communities, in order to ensure that they are not left out of the mainstream of educational development.

Recommendation 2

Problems Posed by the Use of National languages in Education

The Conference

COGNISANT of the commitment of African governments to the development of African languages for use in the educational process, and

AWARE of the complexity of the language situation in many African countries, and

RECOGNISING	that the use of national languages can help in the universalisation and democratisation of education in Africa, and
HAVING ASSESSED	the efforts made in a large number of African countries to develop national languages for use in education,

Accordingly recommends that:

2.1 African intensify their research efforts in African languages and make such research available to those who develop materials for teaching local languages at the beginning and primary levels of education

2.2 African countries document carefully their experiences in this area in order to enable others to learn from such experiences

2.3 the teaching of African languages will not neglect the teaching of the culture that goes with such languages

2.4 efforts be intensified to produce books and other teaching-learning materials on African languages

2.5 countries which share the same languages cooperate in research and curriculum developments efforts in order to facilitate the introduction of such languages in schools

2.6 current research in African languages be incorporated into school work using these languages

2.7 the production of literature on African languages be intensified in order to ensure literacy in these languages by children who have studied them in school

2.8 African countries show more evidence of the political will to overcome any obstacles to the use of African languages in education.

Recommendation 3

The Relevance of African School and University Programmes

The Conference

FULLY AWARE	that relevance has physical, psychological and philosophical dimensions, and

RECOGNISING that African education in the year 2000 has to be relevant to the needs of the 21st century, and

COGNISANT of the fact that colonisation has had ill effects on the content of school programmes in Africa, and

APPRECIATIVE of the efforts made since independence to make school programmes more relevant,

Accordingly recommends that:

3.1 African countries involve all facets of the society in planning and developing appropriate curricula

3.2 African teachers' organisations strive to be at the forefront of activities (on the national as well as on the continental levels) gearded towards making school programmes more relevant to the needs of the African child today and of the year 2000

3.3 traditional African methods of teaching and learning take their place in formal education as a means of encouraging children to learn

3.4 school programmes be the outgrowth of distinct national philosophies of education

3.5 each country study the content of its textbooks together with the interpretation given facts and concepts, with a view to decolonising them

3.6 university programmes of teaching and research be more closely related to the needs of the society which they are expected to serve

3.7 teachers, at all levels, demonstrate increasing evidence of resourcefulness and commitment and take all possible steps to make school learning meaningful

3.8 African children be exposed to a balanced curriculum in school in order to ensure their all-round development

3.9 the idea of "community education" be encouraged, as a means of involving the local community in the development of school programmes

3.10 regional cooperation in the development of relevant curricula be intensified and regional organisations concerned with such activities should transcend existing linguistic barriers

3.11 African governments and international organisations give maximum financial and moral support to inter-African organisations involved in the development of curricula for African schools.

Recommendation 4

Role of Scientific and Technological Education in the African School System

The Conference

CONSCIOUS	of the role of science and technology in development and of their increasing relevance to the life of the African child in the year 2000, and
AWARE	of the commitment of every African government to the utilisation of science and technology in education, and
RECOGNISING	that African countries need to master science and its application (through technology) as a means of combatting underdevelopment, and
HAVING ASSESSED	the current state of science and technology in African education and noting their rudimentary nature in schools,

Hereby recommends the African governments:

4.1 evolve methods of training teachers of science and technology in large numbers and in the shortest possible time

4.2 develop the policy to give better conditions of life, work and salaries to all African teachers to enhance motivation and performance

4.3 explore ways of using local materials for the teaching of science and technology

4.4 encourage more innovative curriculum efforts (at the national and continental levels) aimed at the improvement of science and technology in schools

4.5 provide appropriate forms of encouragement (including remuneration) for persons with scientific and technical skills who propose to teach

4.6 introduce technology courses to every school child, from the first day at school

4.7 expand the exploratory, discovery, and play-way methods currently used in pre-school institutions in teaching of science and technology to primary and secondary schools

4.8 give technology its real interpretation (as man's attempt to tame and to control his environment) and give indigenous technology its rightful place in the school programme

4.9 make efforts to reduce the cost of teaching technological subjects by the use of local resources (skilled people and their workshops, other local trades and employers, etc.)

4.10 encourage teachers to become more imaginative in the teaching of scientific and technological subjects, to develop positive attitudes towards these subjects and to encourage creativity in the teaching-learning process

4.11 ensure that, in so far as possible, the content and methods of teaching science and technology be closely related to the specific nature of the local environment.

Recommendation 5

Educating Teachers with regard to the Interaction between Education and Productive Work

The Conference

CONSIDERING	the fact that it has become imperative that education in Africa be geared towards production rather than towards consumption, and
FULLY SUPPORTING	African governments' efforts to link education with productive work, and
AWARE	that this laudable goal is still far from being attained, and
CONSCIOUS	of the negative attitude of the African populace towards work which involves soiling the hands, and
CONVINCED	that African teachers have a key role to play in helping governments forge a meaningful link between education and productive work.

Very strongly recommends that:

5.1 the notion of productive work be (defined as including to show that it is) a combination of mental and physical activity

5.2 all forms of teaching and learning (at all levels) be geared towards inculcating the spirit of thinking and producing

5.3 every nation take appropriate steps (e.g. rewards, national honours, etc.) to encourage the practice of productive work in the community at large

5.4 teacher training incorporate productive work, with each country adopting the method it considers most appropriate

5.5 teacher organisations in Africa initiate training activities for their members geared towards (a) sensitising them to the need for productive work in schools, (b) demonstrating methods of encouraging productive work in schools, and (c) defining and clarifying the concept of productive work

5.6 traditional African methods of "learning by doing" be reintroduced in schools, with teachers acting as examples of positive action

5.7 programmes of education through productive work should not be limited to rural areas, but be diversified with each local having the type of activity appropriate to it

5.8 the practice of using manual work as a form of punishment in schools be abolished

5.9 teachers' unions in Africa sponsor study tours of their members to countries which have achieved a measure of success in integrating education and productive work

5.10 Unesco and other international organisations distribute, more widely, information on developments in education and productive work so that such information can be utilised by teachers and teacher trainers.

Recommendation 6

Human and Financial Resources for Democratising and Universalising Education

The Conference

AWARE	that laudable educational ideas can be hampered by lack of resources, and
RECOGNISING	the need for African countries to rely more on their own resources for all forms of development activities, and
CONSCIOUS	of the fact that novel methods will need to be worked out to remove the obstacles posed by lack of resources to the realisation of the goals of democratising and universalising education in Africa, and
DESIROUS	that actions towards the attainment of these goals ought to start now if Africa is to keep abreast of developments in the world in the year 2000

Hereby recommends that:

6.1 education be more scientifically planned in Africa in order to enable each country to foresee its problems and to consider, in advance, alternative strategies for addressing them

6.2 support personnel with special knowledge or skills be utilised in the education process: such "support personnel" to receive and initiation to pedagogy in cooperation with and under the supervision of school personnel

6.3 a wide variety of venues be used for formal education (public buildings, churches, mosques, etc.) in order to enable more children to profit from education

6.4 each country work out more judicious ways of managing its resources, especially the resources allocated to education

6.5 countries examine ways of utilising a tax on luxury goods for the creation of National Funds for Education; such funds to be administered openly and with full disclosure

6.6 each country explore the possibility of using young persons on national service to teach in schools, providing that the conditions listed in 6.2 are followed

6.7 teachers' associations continue to work towards instilling a professional conscience in their members

6.8 the use of suitable local materials for school buildings be encouraged

6.9 African educational researchers study closely the functioning of Koranic schools, with a view to seeing the extent to which this approach could be used in formal school settings

6.10 appropriate ways be found of encouraging fund-raising activities by pupils (including gains from productive work in school) as a means of supplementing government budgetary allocations to schools

6.11 donor agencies increase external aid to education with "no strings attached"

6.12 the private sector in each country (and individuals in the community) be encouraged to contribute in cash and kind to the provision of educational facilities.

Made and adopted by the
PAN-AFRICAN CONFERENCE ON EDUCATION
Yaounde, 9 April, 1984

Yaounde, Cameroon
2 - 9 April, 1984

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WHAT SCHOOL FOR AFRICA IN THE YEAR 2000?

Address by Souleymane N'Diaye
Representing the Director-General of Unesco

Allow me first to convey to you greetings from the Director-General of Unesco, Mr. Amadou Mahtar M'Bow and his regrets at being unable to share with you today with His Excellency Mr. Hele Pierre, Minister for Education of Cameroon, and Mr. James Killeen, President of the World Confederation of Organisations of the Teaching Profession, the pleasure and the honour of inaugurating this very important conference on education.

Allow me, in my personal capacity, as an African, a teacher and a former trade-unionist, to say how delighted I am to be here among you.

We are meeting here to examine a topic of capital importance. One can re-word it in the form of three linked questions, namely: what school should be envisaged for what type of person with a view to what type of society in the year 2000?

The theme "The African school for all in the year 2000" was the central topic of the Conference of Ministers for Education and Planning, held at Harare (Zimbabwe) in May-June 1982. It was discussed at Niamey (Niger) and Kampala (Uganda) in 1983, on the occasion of the seminars organised by WCOTP in preparation for this symposium. It occupies an important place in the Medium-Term Plan, adopted two years ago for the seven-year cycle 1982-1989 by the Fourth Special Conference of Unesco. It has been included in terms of aims and budget in Major Programme II which is one of the means of action approved by the Member States for the current 1984-85 biennium. In selecting it as the theme of this Pan-African symposium, WCOTP is giving to the trade-union officers and heads of service in Ministries of Education, present at this meeting, some ideas that will enable them to participate effectively in decision-making in their respective countries and to acquire sound assumptions for their suggestions regarding educational planning. Our sincere thanks go to WCOTP.

In his well-known work entitled "l'Homme moderne et son éducation", the French philosopher Gaston Berger proposes to us a methodology for forward-looking analysis. He suggests, starting from the assembly of all indications regarding the relevant quantitative and qualitative data, that one take a far-seeing, broad and in-depth view. A far-seeing view means, over the next fifteen years, making enquiries from those qualified in forecasting projections (demographers, economists, politicians) in order to ascertain what the foreseeable future is in their particular area and what the domestic policy of the country concerned could be in that regard, as well as possible trends in the country's trade and cooperation.

A broad view implies convincing oneself that one can no longer decide in isolation that there is any absolute independence in general and school policies, in national economies, and that peoples and States are more and more interdependent. The major problems of the moment - such as orientation of studies in relation with development - can only find a solution at the regional, sub-regional or international level in the context of organised and programmed solidarities.

An in-depth view implies taking account of changes that have resulted in today's citizens no longer living nor thinking as they used to: the hectic life imposed on them by long daily commuter travel tends to make them unstable. They have become more inquisitive but at the same time less able to concentrate their attention, being submerged by an enormous quantity of information and assailed by stimuli of every kind.

It is in this context of speed, mobility and interdependence that Africa is entering the mainstream of today - with the weight of its traditions, the weakness of its resources, the ambiguities inherent in any period of transition and with the will to participate as a full partner in the major decisions made in regard to the conduct of world affairs.

For we, Africans, one has to look at what the transition from a traditional society to a modern society can bring us - but also what it can take away from us. Many older people are already blaming the school as being partly responsible for the slackening of parent-child relationships and of links within the family, for impairing organised solidarity on the occasion of the major seasonal activities that served to ensure the collective subsistence of rural communities, for encouraging among young people a decline in the importance they attach to the values peculiar to our continent.

The new exogenous factor that we must take into account is that in the years to come we must no longer count on foreign cooperation which is dwindling for a variety of reasons. In order to attain the objective of generalisation and renewal of school in the year 2000, Africa will be obliged to mobilise its own resources. External aid can be useful in the context of participation in definition of strategies, in management of the system, in evaluation. It will surely furnish a less modest material and financial contribution. The African school must without fail integrate its activities, objectives and methods in the framework of strategies formulated by the political and technical bodies that coordinate regional development activities. The aim of those bodies is none other than to seek to ensure an adequate relationship between man and what he is to become, society and the satisfaction of its needs and aspirations.

From the cultural aspect, the objectives to be attained towards the end of this century are set forth in the recommendations of the Mexico Conference (Mondiacult 1982). They call for each child to be well versed in the cultural values of this country, in everything - in its original culture that is substantial, dynamic, positively transmissible at the "meeting-point of giving and receiving".

No doubt there is only one Africa afflicted by large-scale poverty and illiteracy, but elsewhere on the continent there exists a very great diversity of peoples and cultures, school situations and pedagogical experiments, accentuated by the influence of the former colonisers who are still present by reason of the number and technical contribution of their cooperation assistants, and the importance of the logistic support that they furnish.

Despite that diversity, and by having reflected on what we have in common and what differentiates us from one another, thanks to the aid furnished by bilateral assistance, by international organisations, non-governmental organisations, the specialised agencies of the United Nations system, independent Africa has launched the movement that could allow it within the next fifteen years or so to build a truly national school, within the meaning recognised by the Lagos Conference of 1976.

It is already very encouraging to find that in the majority of Africa States, functional literacy is dispensed in a national language, in a number of countries the children sing in a local language and dance according to a local repertory in primary school, that they are taught handicrafts sometimes together with some measure of technology linked to metal- and wood-working or to the building trade. One would have found this type of relationship between tradition-based activities and those oriented towards modern skills more frequently if, at the time of embarking on reforms and drawing up curricula, Ministries of Education had secured a larger involvement of Ministries of Culture, of Social Affairs, as well as Ministries that oversee producing activities (agriculture - animal husbandry - industry - fisheries).

We attach a great deal of importance to this linkage between tradition and modernity at school and around it, because we believe that there must be a constant effort to reconcile returning to one's origins, when that is necessary, with fruitful contributions coming from outside sources. Those contributions constitute a powerful incentive for change.

As underlined in the Medium-Term Plan of Unesco, cultural identity cannot be conceived independently of an open-minded attitude towards other cultures. If it existed only in and through its relationship to the human group that is its carrier, it would constitute a closed system that would generate anarchy, decline and collapse.

We would bear that statement in mind when taking up the problem of national languages. For the moment, we should recognise the fact that since the 1960s Africa has not succeeded in translating into action its desire to introduce into curricula the most authentic features of its civilisation, its ways of thinking, feeling and acting, its arts and its literature, proves that it is not easy in the field of cultural anthropology to move on from intentions to action. The problem is a challenging one for African philosophers, sociologists and political economists - indeed for everyone who, by reason of sympathy and objectivity, can be a source of good counsel in the essential sorting out of what is substantial and deserving of being retained and activated as educational content, as apart from what is artificial, ephemeral and cannot survive the test of time.

Another difficulty to be overcome is the resistance put up against innovation by African executives who, because of excessive acculturation, are unable to take the cultural values of their own society seriously. More than any others, they remain too much attached to the Western educational model to which they owe their own training, and for that reason are incapable of imagining any other model.

One of the advantages of Unesco's existence is that it can help these executives to discover other ways of promoting educational systems and developing ideas for reform.

These remarks prove once again that with a view to renewal of the African school, the States have not yet acquired the necessary resources for eliminating the accumulated cultural, social and economic handicaps.

Notwithstanding the progress made since the Addis Ababa Conference of 1961, in only few countries of the region does the school attendance rate exceed 60% of children aged 6 to 11 years old; in most of them only 20% of pupils move on from primary to secondary education for more than 5% of pupils who entered primary school at age 6-7 years. And yet over the past twenty years those countries have achieved remarkable performances from the quantitative aspect: over that period, the number of pupils has tripled in primary school, has doubled in secondary school, while the number of students in higher education has increased eight-fold.

Notwithstanding this progress, Africa is still faced with two major challenges: The first of them is the challenge of democratisation of education. It comprises two essential dimensions: on the one hand, the need to satisfy the right to education for all strata of a population that is increasing too rapidly, and on the other hand, the need to catch up on the backwardness of rural areas in relation to urban centres.

Almost everywhere, after the period of euphoria of the years 1960 to 1970, one can see that national budgetary appropriations for education are increasing only slowly and that external aid for basic education is being cut back. On the other hand, demographers estimate that between 1975 and the year 2000, the child population aged 5 - 15 years will have increased from 105 to 216 million, while over the same period the adolescent and adult population will have risen from 217 to 437.

At the request of its member States, and without losing sight of this quantitative element, Unesco has drawn up a Major Programme in regard to the elimination of illiteracy among children and adults towards the end of this century. Attainment of that ambitious objective will depend on the political will applied in the implementation of revised curricula, with a view to having a better impact on pupil attitudes and aptitudes. Success will also depend on the assistance that the Ministry of Education receives from other ministries and from the public and quasi-public authorities. School will function properly everywhere if all the technical staff participate alongside the teacher in educational and training activities.

The second challenge concerns the difficulty of implementing production-linked education in a society where growth would be beneficial to the rural and urban population as a whole. Initial training must be seen as an introduction to lifelong training: the active population must be constantly educated and re-educated so as to be able to adapt to all changes.

A number of experiments have been tried in Africa with a view to securing, on the one hand, the adequacy of training in relation to employment and, on the other hand, the integration of education in its economic environment. We shall certainly have occasion to mention some of them.

Without being pessimistic, one can say that none of them can serve as a typical example that could be proposed as a model at the level of the African Region: this reluctance to generalise these experiments is justified by the fact that none of them has constituted a real and adequate response to the problems of food self-sufficiency. None of them has generated any agricultural vocation on the part of children nor dispelled their prejudices in regard to manual work. Most of these experiments have yielded results that were positive from the pedagogical aspect, but negligible from the economic aspect.

Interaction between school and the environment has not been operational because it was devised unilaterally by the teacher, in the name of the authority he enjoys by reason of his diploma and his responsibility for administering the school establishment. Such attitudes under-estimating the role of the environment must be overcome if the school of tomorrow is to be something that is wanted by the peoples of our countries, and if the peoples are to cooperate in defining those parts of the curriculum that involve production and the school-environment relationship.

The pupils have also experienced disappointment: introduction to practical tasks has not succeeded in making them want to become an agricultural or livestock producer because, looking at their parents' living conditions, they have realised that, as compared with the intellectual professions, agriculture and animal husbandry do not offer a sufficient return on which to live decently.

The difficulties encountered in efforts to establish the school-environment relationship lead us to think that the real change occurs only when the environment changes at the same time as the school: in the positive examples we know of, school-educated children in fact became farmers only in countries where they had access to land to cultivate, where prices of agricultural produce have been revalued, where the cooperative and the National Development Bank have supplied the new producer, at the time of his installation, with the necessary equipment for animal-drawn or mechanised cultivation methods. It is for this reason that reforms cannot and must not remain something undertaken in isolation by national Ministries of Education.

One of the most difficult problems to solve in the perspective of building up a national and democratic African school by the year 2000 is that of the use of languages as teaching languages. A few countries have succeeded more or less in organising their primary education in the national language. They are among the minority of States which have the good fortune to be monolingual; there are only five such States in Africa south of the Sahara. In the great majority of the other African countries there is a multiplicity of dialects. Many of them have more than a hundred spoken languages. A recent study notes that in 30 African countries there is little hope that in the near future any local language can develop to the point where it could be considered as being the country's national language.

On this important problem we must make it clear that Unesco cannot take the place of member States to define the status of their languages and give the latter a specific function in national education. Unesco has no attitude to suggest in regard to their language policy: the framing of that policy is a matter of national sovereignty.

Unesco endeavours to secure implementation of the principles that the member States have approved by consensus on the occasion of General Conferences. It seems relevant to mention some of those principles on the present occasion, namely that:

1. the language policy of a State is an important aspect of its cultural policy, and there can be no proper didactics of local languages unless a clear and realistic language policy is drawn up beforehand;

2. if a child is educated in his national language, the spirit of his people will not be betrayed; but in order to be able to communicate with other peoples, look out upon the world, benefit from the universal heritage, it is useful for any person in today's world to learn, in addition to his national language, a language of major international communication;

3. any language, even a spoken one, can one day become a language of instruction provided it has a code of written transcription allowing its phonology and melody to be recorded, its structures to be explained, and its discourse to be modulated. For such a language to be made suitable for technical and scientific instruction, there must be stages of fundamental and applied research, experimentation and vulgarisation, which inevitably take time.

This means that the development of African languages as vehicles of education in the school of tomorrow cannot be achieved in the near future in all countries, and in general will certainly not be achieved as rapidly as the most hurried national trends of opinion would wish. To encourage them to move in that direction, one must show them the advantages they can derive from education in a national language. The use of didactic material in a local language allows better receptivity in regard to certain concepts that are difficult to translate. It allows the education of children and adults to proceed side by side. It would undoubtedly reduce school failures and internal wastage. It would facilitate intervention on school premises of all those who, in the environment, can teach or practise a given subject included in the curriculum.

Solution of this problem largely depends on the role of higher education, on fundamental and applied research: The Harare Conference had to deplore the fact that the African university is as yet somewhat marginal and uncommitted in regard to the needs of the fight against under-development.

If we take a critical look at African society of today, we see that it is undergoing changes that are sometimes more rapid than elsewhere because of the import of a foreign way of life, facilitated by exchanges of all kinds.

The enlarged African family is falling apart, communities are being dispersed because work in the field, responsibility for livestock have become individualised activities, because obligations in regard to the State are personal (e.g. taxes).

The concept of the head of the family linked to a gerontocratic structure or to the function of administrator of collective means of subsistence intervenes only on the occasion of major family or religious events. The parents educate their children less and less, being overwhelmed by work. They tend to delegate to other institutions the task of educating and training their children. Public censorship is less and less effective because there is no longer any general agreement on certain moral values: concepts such as obedience towards one's parents, freedom, modesty, are viewed differently in the urban and rural areas, accultured and traditional.

Teaching machines and professional equipment are bypassing the need to reason things out for oneself in order to decide for oneself. We must stop asserting that children no longer want to learn anything. Taken out of the context of present developments, it is a fragmentary and unfair statement: children do want to learn, but something more than what the traditional school can propose to them, and with the aid of other means of communication, other tools of learning.

The lesson to be drawn from this trend in the mentality of young people today is that it is now essential to select what is to be taught on the basis of new criteria: what is to be taught can be reduced in volume without any lowering of level in the academic scale of knowledge and professional aptitudes: future curricula will have to integrate several convergent subjects around essential poles of development. This will be an opportunity to give children the means to inform themselves. It will perhaps be necessary to reorganise school time so as to make a double-rota possible. As far as they can, the governments will continue to build additional schools and classrooms. But it is not in the exclusive context of these increasingly expensive premises that they will succeed in educating the millions of children who are deprived of access to school because of the lack of places, teachers and adequate school supplies. The solution to the problem lies, inter alia, in diversification of the premises where instruction and training are dispensed. Certain countries have made a radical mobilisation effort to reduce adult illiteracy. Why could this example not be proposed with a view to the universalisation of basic education?

In future, the teacher will have to work as part of team: more and more he will need assistants in the educational areas involving productive work, health education, handling of appliances of all kinds, etc. The use of part-time teachers can reduce the number of staff that would have been necessary in order to educate all children. But it will make administration of the school establishment still more complex: the intervention in school of craftsmen, artists, doctors, agronomists will have to be taken into consideration in future relationship between the director of the school and his colleagues of this new type. School legislation will have to be adapted accordingly.

Computer technology, radio, television and the press seem to be becoming essential cognitive instruments and pedagogical tools for the school of tomorrow. One should not go too far, however, by placing too much reliance on these technical and audiovisual media: the teacher will still be the principal artisan of pupil training; educational technologies must never be more than his auxiliary resources. For them to be as profitable as possible, they must be used to train children and re-train teachers and, where possible, to equip workers and peasants with additional skills.

If there is little possibility of increasing Ministry of Education budgets, governments must therefore select and make best use of the didactic means available. This falls within the framework of rationalisation of education systems at the internal and external levels. At the internal level, we have already suggested curriculum selection taking account of integrated studies, the use of national languages as a means of reducing wastage and eliminating duality as between education of children and of adults.

To these suggestions, we would add three more:

1. improvement of the professional qualifications of all teaching staff in service. Their training should be polyvalent. Requalification of teachers would include the ability to teach subjects in relation with the production and health of pupils, and to produce didactic material in their own schools. They must also learn to work as part of a team with other teaching personnel, and to maintain new relations with the surrounding population;

2. local printing of pedagogical material and of school-books for primary education. This implies that the African States should establish training centres for personnel specialised in the printing, illustration and publication of school-books;

3. multiple use of existing buildings, fixed installations and equipment. A new type of school architecture, a new system for maintenance and supervision of premises would be devised in order to allow alternating group attendance and diversified educational activities.

We are approaching the moment where the smallest localities will be calling for a school, as rural areas are no longer isolated and the media are awakening the attention of peoples everywhere. It will then be necessary to consider the establishment of single-class schools such as existed in France under the IIIrd and IVth Republics, and to revert to schools with enrolment on a two-yearly basis (in the 1st year the classes are numbered 1-3-5; in the 2nd year, they become numbers 2-4-6).

Current educational policies in Africa are divided among those that would prolong primary education so that the pupil does not move on to active life at age 15-16 without a strengthened production aptitude (as in Rwanda), and those that are rather tending to reduce the duration of primary education so as to give each child the minimum amount of instruction and education that can allow him to face active life with better chances.

The second trend seems more in tune with the objective of education for everyone by the year 2000. It could take from the first trend some elements for ensuring sufficient relevance in curricula.

This is not a matter of settling the discussion by finding it appropriate to give priority to quantity rather than quality. The ideal is to pursue universal education efforts in Africa through curricula adapted to the objectives of the continent's economic, social and cultural development. But given that the question of financial resources is always at the forefront in connection with such universalisation and education, it is essential first to consult the economists of education whose task it is to furnish the necessary resources.

The credit margin on which governments can draw depends on a number of factors well known to them: agricultural and industrial output, resources, trade balance, national indebtness, per capita production, economic forecasting. It is important to know from the outset whether on the basis of those factors one can hope to have the necessary resources to frame a policy of comprehensive education for school-age children and changes in curricula, methods and techniques.

In all this, we have said very little about the women. In Africa, women produce 65% of agricultural resources. They look after the home and educate the young children. They are an important development factor from the day when an African woman will be able to give birth to her child in optimum conditions of safety and hygiene, to wean him progressively, once society can offer adequate structures for pre-school education of good quality, then the young African will start out on life with better chances for development and fulfilment. In order to give the African woman the means to assist the teacher in his task of education, she must also be trained and associated in everything that goes on in and around the school.

One can hardly avoid concluding such an address on either an optimistic or a pessimistic note. For my part, I shall yield to optimism having regard to the characteristics of our continent, to the faith I have in conscience-awakened man and to the hope one can place in the results of meetings such as this.

Paul Valéry said that there are two dangers threatening man: order and disorder.

The school of today is fixed, it is unchanging in its conception, activities, realities. It symbolises an order that has lasted too long. If we look at the staggering progress of science and technology and the troubles currently besetting the world, we cannot but have the impression that our era is moving on towards disorder, even the apocalypse.

Coming as we do from a continent that has known slave traffic and colonialism, from a region that - with the exception of South Africa - is still excluded from industrial development, we do not have the right to accept underdevelopment as something inevitable. It is our duty to force destiny by trying to ensure that we are no longer beset by hunger, precarious living conditions and epidemics. Africa must strive to eradicate illiteracy. We are therefore bound to be optimists because, without such an attitude, we might well abandon all effort to overcome the obstacles to development.

We believe that there are chances in Africa for achieving, toward the year 2000, the objective of universalisation and renewal of primary education. The main motive force, as we have already said, will be the people itself, if governments succeed in involving and mobilising the people. The problem is political before being pedagogical.

As pedagogists, it is our role to design the outline of a school more consistent with its environment, and with a renewed structure and functioning. We hope and trust that in this educational context where the community can recognise itself better, children will feel the desire to live in their own locality and participate in its development. They will then come back to the habit of using their limbs as well as their brains and, through their work and creation, forge their own place in society in keeping with tradition.

The World Confederation of Organisations of the Teaching Profession must be warmly and sincerely thanked for having had the idea of this symposium and for having organised it so well. This meeting will have given to numerous organisations coming from different regions of Africa an opportunity to compare their experience in regard to renewal of educational systems and to try to discover together new strategies which, without sacrificing the quality of teaching, can lead to its expansion at the lowest possible cost.

We shall not leave this symposium with any ready-made truths, nor with any magic recipes for bringing about changes in school policy. However relevant our remarks and comments may be, and however accurate our vision of the future, before they can be translated into action they must pass through the stage of planning the material, human and financial resources without which any reflection on the future evolution of school can only be an unrealistic dream.

On behalf of the Director General, I should like to underline that Unesco is fully available to examine in depth any pedagogical concepts, outlines and prospects that may be put forward in the course of this symposium.

Our organisation is an appropriate framework for verifying that hypothetical assumptions are well-founded, particularly in the area of educational projects. It can help to define the limits of what is possible, to link the future to the present, while waiting to be able to guide each of your countries along the path of innovative action and implementation of experimental activities.

Pending that moment and the coming of the new African school of which we look forward, allow me to thank the Government of the Republic of Cameroon for having placed this wonderful "Palais des Congrès" at the disposal of this meeting and to express, on behalf of Mr. Amadou Mahtar M'Bow, Director-General of Unesco, and of the delegation I have the honour to lead, every wish for the entire success of this important symposium.

Case study on the theme:

Problems posed by the teaching of national languages

The following four contributions should give an analysis of their national situation using the following question as a starting point:

how is it possible to reconcile a national language with:

- the maintenance and development of national unity;
- the preservation of all cultures in the country;
- the modernisation of society;
- the pedagogical imperatives.

PROBLEMS POSED BY THE TEACHING OF NATIONAL LANGUAGES

Case Study: Utilisation of Kirundi in Burundi

I. Context and place of "Kirundization" of teaching in the reform of the educational system of Burundi.

Note: Burundi is a country where Kirundi, the national language, is spoken in all regions of the national territory. Even if one word or another is used in one or other region more than in another one, one cannot speak of the existence of dialects. Burundi is therefore a monolingual country.

1. The first official text deciding the decolonisation process for education dates from 10 June 1970. That text established a National Commission for the Reform of Primary Education.

2. In February 1973, a permanent bureau for pedagogical research and action, the Rural Education Bureau (BER) was established to plan, organise and evaluate the reform.

Within the Bureau, for each subject in the curriculum there is a workshop which plans the programme, prepares teachers to implement it and provides the necessary back-stopping.

3. What is the objective of the 1973 reform?

The 1973 reform was to focus on two fundamental options:

- to revalorise the national culture, and;
- to make education profitable.

These two fundamental options were to be translated into reality by:

- Kirundization and ruralisation of teaching (use of Kirundi as the language of teaching in a country where more than 90% of the population live in rural areas);
- professionalisation of teaching at all levels.

In brief, these two objectives have been underlying pedagogical action in Burundi since 1978.

3.1. Making education profitable through professionalisation

Apart from scientific knowledge and acquirements, the reform made provision for opening as many streams as necessary at the secondary and university levels and for furnishing, in

each stream, vocational training. The role assigned to primary school is not merely to educate pupils in the perspective of access to secondary school. Children must acquire practical knowledge about agriculture and animal husbandry, domestic science and crafts. The aim is to revalorise productive work within the framework of a school cooperative managed by the pupils themselves, with the teachers and parents only in advisory capacity.
On completion of primary school, a nation-wide admission examination to secondary school is organised - in fact, a competitive examination. The unsuccessful candidates, or at least most of them, continue in general training centres where the curriculum comprises a number of streams: agricultur and animal-husbandry section, domestic science section, masonary section, carpentry section, motor-vehicle mechanics section.

A separate department (department of quasi-school education) has responsibility for children who do not attend school or have left school early, and for action to overcome illiteracy.

No diplomas are awarded to young people who complete this vocational training and go to earn a living, in rural communities (the motor-vehicle mechanics section is tended solely for urban areas).

Technical education is developing rapidly in the secondary schools. Pupils who fail to meet the standards of general secondary education are transferred into vocational schools.

At the university level, all the pedagogical units (faculties and institutes) are professionalised: students graduate not only as geographer, historian, mathematicien, etc., but as teachers of geography, history, mathematics, English, French (pedagogical training), or as engineers, doctors, etc.

Most young people who fail to complete their university studies or who are considered not sufficiently talented to undertake them are guided towards occupations for which the training period is short: police, journalism (middle-level), town planning and administration, customs administration, etc.

This professionalisation at all levels is designed to make the education system profitable.

3.2. Revalorisation of the national language and culture through "Kirundization" of teaching

The final objective of the reform of Burundi's education system undertaken in 1973 is to establish a community school, fully integrated in the community and financed and administered by it.

The other motive force of this reform is that teaching should be in the language that the community speaks - i.e., Kirundi (the common language of the people of Burundi). This "Kirundization" of teaching is designed to facilitate contacts between school and the surrounding environment, between the child and the community of which he must speak the language, participate in the culture and the various social and economic activities.

In primary school, Kirundi is therefore the teaching language. I have been asked to speak about problems of teaching national languages, problems of learning Kirundi in Burundi. It is appropriate to mention that it is not just a matter of teaching Kirundi or of teaching in the Kirundi language, but of teaching in the Kirundi language while using the geographical, historical, cultural, social and economic contexts of Burundi. One can therefore understand the role of study of the environment which is considered as the pole of integration for all other subjects in the curriculum.

II. Present status of "Kirundization"

1. Some results recorded so far.

1.1. "Kirundization" of teaching has had positive and encouraging results. These results are largely of a cultural nature and are not quantifiable.

1.2. We have nevertheless been able to note an increasingly appreciable change in the attitude of young people in regard to their language, their culture and the moral communities: this indicates that young people will less and less be cut off from their environment.

In addition, society encourages children and parents to love their language and their culture since Kirundi is the language of political and other speeches, the language used in meetings of all kinds. Moreover, one nation-wide radio network is entirely concerned with Kirundi and rural activities.

1.3. Cultural methods and home management are an integral part of school curricula and are taught to pupils in a language that parents understand: this contributes to dissemination of these new cultural methods and of other useful branches of knowledge. Social workers and agricultural advisers are also engaged in this task.

1.4. Teaching in the national language has allowed learning of crafts. This has made it possible to introduce the system of double assignment of premises and teachers and of group promotion. For almost two years now, each class-room and each teacher welcomes two groups of children - one in the morning, the other in the afternoon. There will be an evaluation system, but except in case of illness or well-established inability, all children will move on until the end of primary school, when they must pass the nation-wide examination for admission to secondary school. Pupils who fail that examination will have acquired the necessary knowledge to be able to do a useful job in their own environment, with opportunities to improve their ability in the general training centres already mentioned.

The double-assignment system implies an additional effort from teachers who, in return, are granted a special bonus.

2. In line with the title of this paper, we shall now mention problems encountered in promoting Kirundi as a teaching language, and solutions adopted:

2.1. After ten years of the reform process, all subjects are now taught in Kirundi, but only up to the fourth year. The reason is that "Kirundization" has not yet been able to go beyond the fourth year because the Kirundi lexicon does not yet offer the technical and scientific vocabulary needed for certain important subjects.

Because of this problem, in 1979 we halted these activities temporarily in order to allow the Fundamental Workshop (one of the BER services) to set up a technical lexicon of Kirundi terms to be used in all subjects.

Since 1979 and in collaboration with the Department of African Languages and Literatures Department of the University of Burundi, the BER has been carrying out systematically, subject by subject, lexicological research.

As from the coming school year, "Kirundization" will be extended to cover the fifth school year, and at the same time we are expecting publication of a monolingual Kirundi-Kirundi dictionary.

The major obstacle to "Kirundization" has been the inadequate lexicon of the national language. As already mentioned, this lexicon is currently being adapted to the requirements of present-day living through the translation of creation of scientific and technical terms.

This solution inevitable leads to another, though less important, one, namely the creation of neologisms - of words new to children, to parents and even to teachers.

This is a problem that will solve itself over time, as and when these neologisms are accepted, learnt, made familiar and ultimately integrated in the Kirundi language.

2.2. At the outset, there was a problem of didactic material adapted to the new curricula: to abandon one language and teaching curriculum and introduce another language, a new curriculum and a new methodology with new objectives is in fact tantamount to starting from zero, to devising and preparing new didactic material. This calls for a great deal of work and for substantial resources. Accordingly, the BER has been equipped with a pedagogical production unit (a small printing works) for the production of school-books and other pedagogical documents. The Government has recently increased the resources of the unit so that i can produce material for the needs of all levels of education.

2.3. A change of objectives in regard to the teaching language, curricula and methodology brings other requirements: the new standards of pedagogical activity have to be publicised, through documentation on the new objectives, new curricula, new methodologies, pedagogical card-indexes for each subject, radio programmes, re-training courses for teachers (a systematic programme of lifelong training), information drives among the general public - these are only some of the activities that preceded introduction of the reform.

As regards initial training, the reform is taught and explained in the teacher training institutes where new methodology is taught. There are periodic re-training facilities for teachers, school directors and education inspectors, while reform programme officers travel around the country to ascertain the views of teachers with view to possible readjustments.

2.4. The contexts used in teaching are taken from the rural environment - this is a problem for children in urban centres, where intervention by parents has proved fruitful.

2.5. In primary schools, Kirundi is the teaching language, whereas in secondary schools, teaching is in French, so that there is a gap. Teaching of the French language begins in the third year, and the seventh year is to be preparatory year for secondary school, and will in particular include an intensive cours of French, so as to fill the gap currently existing.

Remarks: "Kirundization" will not be an isolation factor for Burundi. Kirundi continues to be taught (as a teaching subject) in secondary school. At university level, there is a Department of African Languages and Literatures which trains teachers and professors of Kirundi.

In secondary school, in addition to French, English is compulsory. It is even compulsory in all faculties of the university where, furthermore, a Department of English Language and Literature was opened more than ten years ago in order to train teachers of English.

Kiswahili is likewise taught. This language possibility is seen as a means of ensuring external links for a country situated between the English-speaking region of Africa (Tanzania, etc.) and the French-speaking region (Zaire, Rwanda)

PROBLEMS POSED BY THE TEACHING OF NATIONAL LANGUAGES

Case study : Teaching of national languages in Mali

I. Introduction

Teaching of national languages was introduced, in October 1979, in the first cycle of basic education (primary education).

It started in four classes, each of them situated in a school that was opening for the first time in a village having no school establishment.

Today those languages are taught to 5,049 pupils by 121 teachers divided among 67 schools with a total of 108 classes.

These quantitative results, which would be larger if certain constraints were removed, lead us to examine the objectives of this teaching and the problems arising from it.

II. Objectives of teaching of national languages

Teaching of national languages is designed to give each child the opportunity to learn his own mother tongue first before having to cope with a widely-spoken national language.

III. Problems arising from teaching of national languages

The problems arising from teaching of national languages stem from the content of school curricula and the means for implementing them.

Teaching of national languages using the conventional curricula with a better adapted content and a better balanced progression:

- during the first four years, national languages are the teaching medium. Oral French introduced in the second term of the second year and written French, taught as from the first term of the third year, are subjects taught;
- in the fifth and sixth years, French becomes the teaching medium and the national language is one of the subjects taught.

All evaluations made to date show that these new schools have better results, in all branches, than conventional classes at the same level. Furthermore, in these establishments, tensions and blockages of the early years are avoided: cooperation is established between teachers and pupils; relations develop between the school and the community; school losses are negligible.

These advantages point to the desirability of rapidly extending this innovation to the entire first cycle of basic education, provided solutions can be found to certain problems.

A. Technical problems

Teaching of a language implies two essential conditions:

- the creation of linguistic instruments, adoption of a system of official transcription, preparation of a lexicon, dictionaries, grammar, etc.;
- publication of literary and scientific texts, various information and training documents.

Some important studies have been carried out in these areas for the four languages taught: Bambara, Peulh, Songhoï, Tamacheg. The other six languages are currently the subject of systematic research which should allow their introduction into the formal education system.

B. Pedagogical problems

These concerns teaching methods and teacher training. Teaching of national languages is characterised by easy acquisition of instrumental knowledge. The problems arise with the start of learning to read in French, when the pupil is confronted with new signs, new phonetic values attributed to familiar letters.

These difficulties, having been identified by researchers and pointed out to teachers, are smoothed out through the teaching of oral French and through foreign-language learning techniques.

Like any other pedagogical innovation, teaching of national languages can not have a positive impact on the education system without adequate training of teachers. We shall therefore have to intensify existing activities for further training of serving teachers and initial training of all teachers to include a compulsory curriculum and time-frame for national languages during the school year and supplementary studies during the long school vacation.

C. Social problems

Parents of pupils, teachers and education authorities are expressing some misgivings and concern over the introduction of national languages in formal education.

They prefer to retain school traditions, as being more reassuring. They must admit as we do that school can not fulfil its mission of transforming and improving the environment without being transformed itself.

They expect some lowering of the level of master of the French language which remains the official language and the teaching medium as from the fifth year of schooling.

Evaluations confirm the quality of education in the new schools, and this will no doubt be borne out be the results of the end-of-cycle examination that is to be conducted in the two types of school next year, in identical conditions.

Some people think that innovation is reserved for the rural population who will be deprived of access to the higher stages of education.

The national languages are now being introduced into classes in urban centres, thus putting an end to those suspicions which stem from failure to recognise the objectives set and the results achieved.

D. Financial problems

Implementation of this education policy requires the mobilisation of resources deriving in part from bilateral and multilateral cooperation.

This contribution from friendly countries and international organisations, which is essential at the starting-up stage and is justified having regard to our modest resources, needs to be reconsidered.

Arrangements must be made to allow our actions to be financed out of our own resources to a great extent and for evident reasons.

PROBLEMS POSED BY THE TEACHING OF NATIONAL LANGUAGES

Case study : Kiswahili in Kenya

Many African countries today are working hard to establish either one of the languages of their ethnic groups or a popular language to be a national language. The most predominant language amongst a number of ethnic groups could be the national language. For example, in Kenya today Kiswahili which used to be known as a language of the coastal group of tribes (the coastal here refers to tribes living along the coastal line of Kenya bordering Indian ocean) is now accepted as a national language.

Kiswahili has also been adopted by the government of Tanzania (a Kenya neighbour to the South) as a national language. Discussions are also going on in Uganda that Kiswahili which has been accepted by her two neighbouring states as a national language can be more compromising amongst her ethnic groups to be the same. Even the Kampala, Uganda conference held at Makerere University, May 1980, adopted (under LANGUAGE POLICY) that there is a need for every African country to address itself to the adoption of an indigenous national language, with a view of all African countries to considering and adopting a continental official language which will facilitate communication and thus enhance the prospects for educational interaction, sharing of experiences and information exchange.

In fact, Kiswahili is one of the three most spoken languages in this continent to be accepted as a channel of easy communication amongst the peoples of Africa. In three major conferences held in Cairo-Egypt, Accra-Ghana and Lome-Togo, the All Africa Teachers' Organisation (AATO) remained unanimously decided that Kiswahili, Hausa and Arabic should be established as the acceptable languages in Africa and should be used in all the continental meetings.

The problems that have not made it possible to get these three languages effectively functional in Africa are lack of their effective teaching in the learning institutions even in those countries where they have been accepted as national languages. Of course, this is not true with Arabic which is being effectively taught in the African countries North of Sahara where it is predominantly used.

In Kenya problems we have been facing in making Kiswahili fully adopted as both national and official language is lack of its effective teaching. This has been so because of lack of qualified Kiswahili teachers and books.

We inherited this from the colonial rulers who intentionally decided to keep the teaching of Kiswahili on the low profile on the grounds that there were no textbooks. In fact, they were not interested in encouraging the writing of text books for the teaching of Kiswahili for reasons we all know in Africa.

We lack many qualified Kiswahili teachers today in all sectors of learning institutions because those who went to school from 1951 upto date have not been effectively taught this language. It has not been effective because it is not a compulsory language-subject like English is in our both Primary and Secondary education system. As a result of this it has not been an examination subject in the certificate of Primary examination (an examination taken at the end of the seven-year primary schooling). It has been an optional examination subject for candidates taking Kenya National Certificate of Examinations Ordinary Level (an examination taken at the end of the first four years of secondary education). What it means here is that in primary schools teachers and pupils have not been taking the teaching and learning of Kiswahili seriously. Even our Secondary Schools can only count on few teachers and students in this regard. This is because a subject which is not examined or made compulsory in Kenya national examinations is seen by members of the public as being of no value to the society.

However, it has been decided that Kiswahili will now be a compulsory subject in all primary schools and will be examined as a compulsory subject at the end of the eight year primary education system beginning next year, 1985 when Kenya will start to implement the 8 - 4 - 4 system of education (that is the 8 years of primary, 4 years of secondary, and 4 years of university, ordinary degrees - education cycle). This will also lead to making it compulsory in the national examination to be taken by those who will graduate after the four years of secondary education in accordance with this new system of education.

We in the Kenya National Union of Teachers (KNUT) fully support the government in its new policy to make Kiswahili effectively taught in the learning institutions so that all the students that will have gone through schooling from next year will be able to communicate effectively in Kiswahili. This will enable it to be both national and official language used by Kenyans by the year 2000. We say by all Kenyans because we are also out to teach the adults who are not good in it to be effective in its usage by the year 2000.

The other major reason for having all adults in Kenya to communicate in Kiswahili is to enable them to bring up their children into Kiswahili as a mothertongue. This will take the place of a number of different mothertongues derived from the 41 tribes and other races. We are doing this because we are aware that the basic language education given to a child at home before he goes to a formal school is the mothertongue.

Mothers in many parts of the world are the "first language teachers". They carefully and patiently influence their children's speech development and language acquisition skills. If their interests are not properly developed into a language like Kiswahili by thinking and acting in it, then they will have their children also act and think in the same way.

Any changes in the language of communication will also bring about changes in the cultural heritage of a society. That is why we feel that, in order to make all Kenyans feel that they belong to one nation, they should have one language which will make it easy to come to one cultural behaviour. Kiswahili is the only solution to this need.

We are aware in our move that some of the Kenyan politicians and others in well placed positions who were very badly influenced by the colonial rulers to believe that, if a person does not know good English then such a person is primitive. Such people still think that English should continue to be the official language of all Kenyans. On the other hand some elite in Kenya who come from big and effective tribes would like to see their tribal languages adopted as national and official languages. If this is not so, then we should still continue with English. We always tell such people that there is the universal agreement with the well known American pioneer in linguistic study that, "Language is a complex inventory of all ideas, interests and occupations" that make up culture. Therefore in order to change from English culture which is foreign, it is high time that the patriotic Kenyans must develop their children into the effective usage of Kiswahili. This will enable us to have qualified teachers who will also write good textbooks for its effective teaching.

We trust that all other African countries will also take this challenge.

PROBLEMS POSED BY THE TEACHING OF NATIONAL LANGUAGES

Case study : National language in Zambia

The teaching of national languages has been an issue overtaxing most African countries since the dawn of our national independence. The reasons for these problems have been ranging from political, economical, sociological just to mention a few. Various forums and meetings of various kinds have tried to tackle this one single problem, with varying degrees of success and failure. Admittedly, the subject is a complex one which requires persistent attention, in order to enable African countries to come up with not only national languages but also regional languages and possibly continental languages.

Secondly, if Africa is going to develop the intellectual and cultural aspect of her life she needs to develop the language of her own which she can be proud of. However the question is not an easy one to contend with. I am therefore not going to waste much of your time on this crucial and debatable question. My role this afternoon, is to try and portray the picture as it exists in Zambia, on how the national languages have been tackled by the people of Zambia to find possible solutions and possible answers to this explosive issue.

I am sure that most of you may be aware that Zambia as a country is a multilingual country with 76 spoken languages according to the latest figures compiled by the curriculum development centre (CDC). Out of these languages 40 are literate languages which means that some literature has been written in these languages. However, out of 76 languages, seven of these have been selected as the national languages to be taught in schools. The criteria for selection will be discussed later on.

The following are our national languages:

a) Nyanja
b) Lozi
c) Tonga
d) Bemba
e) Lunda
f) Luvale
g) Kaonde

These languages together with English are designated as official languages. Most of you may be surprised to note that the English language has been included. Further explanation will reveal to you reasons for its inclusion on the list of our national languages. But it should be made known that these (a - g) are national languages in the sense that these languages are taught in schools as subjects in appropriate areas of our country, and they are also used by our radio broadcasting systems for the benefit of the people who can speak and understand such languages. Some provincial newspapers are printed in some of these languages, such as Intanda in Bemba to mention but one of them. English on one hand is used as the official language because it is used as a medium of instruction in all our institutions of learning, from Grade I (one) up to the University level. It is also being used as our official language, in all the governmental transactions, like the parliament, the courts of law, the radio and the television.

Coming down to some major reasons why the languages were selected to be used as our national languages, the main criterion used to select a particular language for a particular area, was merely a zonation. A large area was selected and all the tribes found in such areas who had similar dialects to the main language spoken in such area were grouped together, for the main language to be used as the national language for such area. In this way Bemba was used in Northern Luapula, Copperbelt and part of Central province. Nyanja for Eastern, Lusaka province. Lozi for Western, and part of Southern province. Tonga for Southern and part of Central province, in exception of North western province where three languages were taken. These were Luanda, Luvale, Kaonde because each of these languages were completely different from each other. The situation may sound very confusing and complicated but the nation is coping with this arrangement made for our people. It was thought to be the best way out, though controversies have arisen as we shall see later.

Firstly, the argument advanced for the teaching of English language as a medium of instruction in our schools, said to be based on mobility of Zambian people who moved from one place to another, does not hold water to warrant the teaching of English as medium of instruction in schools, because the number of people involved is minimal. We cannot base our arguments on a minority group of our people and form a policy on this group. It is therefore being realised that this trend be reversed if the reading skills and abilities of our children are going to improve. Any Zambian language would be much better than the teaching of English in Grade one or two, because of similarities in language patterns of our Zambian languages.

Secondly, the young Zambian child is exposed to the official language of his area, even if it is not his mother tongue, but he is not exposed to English yet.

Thirdly, the psychological factor. The child is immersed in languages in which he is both physically and psychologically involved. This is not the case with English because the language is foreign from the time the child gets into contact with it. He is therefore overloaded with a lot of strange things and situations, sounds, and patterns, which are foreign to a child. In this way the child is discouraged and gives up hcpe of learning. However, the situation is being realised in Zambia. A recent recommendation is proposing that national languages be the medium of instruction in Grade one and two. When the pupils have acquired reading skills and working vocabulary, then they can be introduced to the English language.

Fourthly, the other important fact was purely political. It was realised that in order to maintain unity and stability in the country, English language should be used as an official language, a feature I consider wise as a temporary measure, because as the nation develops and as our children grow tribal inclinations and the feeling of sectionalism and other negative attitudes towards national aspirations will have been eradicated by Zambian people, and the feeling of nationhood will have emerged. Then and only then shall we feel safe to do away with the English language and replace it with the national languages. The trend may take time to realise but I am very optimistic that finally we will achieve and obtain our intended goal.

Problems as they appear now. I have taken a long time to try and show you how the national languages have been selected and the criteria for such selection. This time we shall devote some of our time to indicate to you some of our problems arising from this selection.

1. Let us consider some reactions taken by ethnic groups whose languages have been left out of these national languages. Certain groups have reacted very sharply against such selection and are opposed to have these national languages taught in schools. Resentments have been expressed by Namwanga people of Northern province, the Lamba of Copperbelt against the teaching of Bemba in their areas. The Lenje people of Central province against the teaching of Tonga, in their area. The Tonga of Southern province against the teaching of Lozi in Livingstone.

2. The second problem is that of producing literature to reinforce effective teaching of our national languages. Currently there are very few of our people who can contribute effectively in the production of literature we require to meet the needs of our nation. This is due to the

many problems in this field. One such problem is lack of skilled personnel to produce and write the necessary books for our schools. We need many of our people to be trained in writing and producing books of our own. Currently there are a few who are writing books, reading materials in our national languages in our primary schools, but hardly any in our secondary schools.

There are no books in the national languages at all in our tertiary institutions of learning let alone the University of Zambia. The challenge is very great if we hope to be counted as a nation with national languages to be proud of. The situation is further compounded by the scarcity of the financial resources to be pumped into these fields. The economic recession in the developing countries has left a serious impact on the development of education system in general and so serious in the development of our national languages, because each year fewer and fewer resources are being allocated to education.

Though international bodies like Unesco and others are helping in this line, we still need more assistance from them in terms of personnel and finance.

The third problem is getting suitable teachers to handle the content materials for presentation in the teaching of these national languages. Strictly speaking there are very few teachers who are trained to handle the teaching of these national languages. We therefore need as many teachers as possible who should be specifically trained to teach these national languages if the nation hopes to improve and uplift the status of those languages in our country. The trend at the moment is that the training of teachers in teaching the national languages in Zambia is not done in the way the teaching of English or French is done. These languages are taught by language specialists who are heavily supported by the suitable literature and other apparatus to reinforce their teaching methods. But the teachers of national languages are merely given some basic skills, mechanics and methodology of teaching our national languages, a situation which is far from being satisfactory. We are therefore proposing that language specialists be trained to teach our teachers of our national languages so that our languages will receive the same treatment as all other languages. Secondly, we also suggest that suitable literature and teaching apparatus be given to all the national languages teachers. In this way the teaching of our national languages will radically improve and will bring it at par with other languages.

Finally on this point, we suggest that wherever possible let us establish an institute or academy for teaching and improving the teaching of our national languages. In this way the nationals will be given skills to equip themselves in handling the national languages with recognised diplomas in this field. In that way it will mean we shall be travelling in the right direction in achieving our goals.

HUMAN AND FINANCIAL RESOURCES FOR DEMOCRATISING AND UNIVERSALISING EDUCATION IN AFRICA

Address by Professor Pai Obanya

1. The problems dealt with in this discussion demand very precise definitions of key terms related to our subject-matter. These key terms, in our view, are EDUCATION, DEMOCRATISATION and UNIVERSALISATION.

2. Education can be seen both in its narrower and its broader tenses. The former equates education with schooling, while the latter sees it as the process of first awakening all the senses of the child, followed by a continuous all-round development of all the capacities of the individual. We can see then that the second view of education goes beyond the simple act of schooling, even though the school could contribute to its realisation. The school has, however, not played the role of fully educating the individual in the broadest sense of the term. Our definition of education, (and this is not all now) is that which combines schooling with whatever helps awakening and continuous full development of the individual's talents to enable him to contribute to the over-all development of society.

3. Democracy takes various forms in different societies. These days, both socialists and capitalists claim that they practise democracy. Traditional African societies are also believed to be democratic. In present day Africa one party states, multiple party states, and even states under military rule all claim to be democratic regimes. It appears that what matters is not the form of government but what each society is looking for. The extent to which a state is democratic will depend on the extent to which it assures the well-being of everyone of its citizens and the extent to which everyone of its members participates in deciding on, and implementing socio-economic policies. It follows, therefore, that a democratic system of education should be the product of consultations within a given community. Such a system should not be imposed from above.

4. The word universal is not all ambiguous. Whatever concerns everybody is believed to be universal. For a system of education to be considered universal it has to be within the reach of all sections of society. In other words, there cannot be marginal groups in a society which aims at universalising education.

5. Coming closer to the subject of our discussion what Africa expects to have in the year 2000 is a system of education (not simply a school system) designed to meet the needs of each society and one which is accessible to all members of such a society.

6. The most relevant part of the topic under discussion is that which deals with obstacles to the realisation of this dream. Generally speaking, there are two categories of obstacles: human and financial. How can we remove such obstacles?

7. From the point of view of human resources, Africa is (in our view) a relatively gifted continent. There are almost no underpopulated places on the continent. It is true that qualified educational personnel is difficult to come by. It is equally true that a large proportion of "trained" and "qualified" teachers are in fact not competent.

   In spite of these facts educational personnel will not be lacking if we redefine education the way we have earlier done. This redefinition goes along with a redefinition of the term, "educational personnel". While the professionalisation of the teaching must be vigorously pursued, we could, at the same time, train support personnel.

8. Support personnel will be made up of all sorts of competent persons in various areas of national socio-economic activity. We would immediately think of the following:

   - students in higher institutions who can teach on part-time basis in lower institutions;
   - the extension of the periods of practical teaching for student teachers in such a way that the help in schools for periods ranging from a single term to a whole year (this has been tried in Nigeria in colleges of education at Abeokuta in Bendel State, and at Ikerre-Ekiti);
   - on-the-job training of primary school teachers, as has just been done in the Gambia;
   - use of skilled persons (in and out of the public sector) who can take care of technical courses in schools;
   - use of every person who has something to offer to learners who could be children or adults in formal or non-formal forms of education ;
   - establishment of "peace corps" in each country whose national service should be done in classrooms. This corps will be made up of young persons just leaving tertiary institutions.

9. Our suggestions will lead to some amount of "deformalisation" of the school as well as of teaching. The classroom, the laboratory, the library will remain in those places where we can afford to build and maintain them. Where this is not possible we could also redefine these "usual" tools of education. Such redefinition will lead us to use the farms, the workshops, the living rooms, the garages, etc., around us as venues for education. This could be a way of linking education more closely with life.

10. Educational support personnel will receive an initial pedagogic training. This will be followed by a systematic system of close supervision for pedagogic advisers and teacher trainers. They could also be supervised by more qualified persons working in the immediate locality.

11. It would be necessary to re-examine closely our national ministries of education to see the extent by which some measures of economy could be fostered by reducing the number of directors, deputy directors, assistant directors, and other professionals currently engaged in office work. By reposting a good number of such persons to educational institutions we shall be increasing the number of qualified teachers in our schools.

12. Point No. 11 leads us to a discussion on financial obstacles. While it is true that most African countries are passing through difficult times, from the economic point of view, it is also true that a lot of money is wasted on prestigeous projects, embassies in all corners of the world, large buildings "of the people" which serve to useful purpose, a cabinet too large for the financial capacity of the country, political functionaries who contribute little or nothing to the real development on the country, and so on. If therefore every African country could carry out a thorough examination of its budget, it would discover sections which are (at least for the moment) not very useful. These can be transferred to the educational sector.

13. It is also possible for each country to undertake another form of self-criticism of its financing of education. It is generally claimed that education "swallows" an unduly large percentage of our national budgets. Have we ever asked ourselves what proportion of such allocations really goes to education? Could it not be that it is the "non-educational" activities of ministries of education which consumes most of the money voted for real educational activities?

14. The African populace will also need to be sensitised to the need for them to bear part of the financial burden of education. In several African societies the populace contribute in cash or in kind to the building of classrooms. In some parts of the continent well-to-do persons often donate school buildings to their places of origin, or to their places of residence. Some of such persons also award scholarships to persons from their locality. This type of patriotism will need to be studied in detail with a view to spreading it throughout Africa, adapting its mode of operation to the special features of each environment.

15. In many parts of Africa it is not basic education which consumes the largest proportion of the budget. It is rather the tertiary level of education. The services rendered by student welfare departments of universities (especially the "Centre des oeuvres universitaires" in the Francophone countries), deserve some re-examination. This goes for the practice of accommodating virtually every university student on campuses. Some of the administrative services offered by our universities also deserve to be carefully studied, with a view to finding ways of making them less costly and more efficient.

16. In summary, we are suggesting a total mobilisation of existing human and financial resources for the benefit of education, as defined in this paper. Making higher budgetary allocations to education is not likely to solve the problem. We can also no longer count on external aid. In fact, we would need to get out of our "beggar mentality" which sends us running after expensive and laborious foreign aid all the time.

17. Our suggestions would appear a little banal. It seems that we have treated a very grave problem to lightly. We are, however, convinced that we would use unorthodox methods to get out of the problem at the centre of this discussion.

INFORMATION AND REMARKS ON THE PANEL THEME

Panel I

Present state of democratisation and universalisation of education in Africa

Inventory of resistance to innovation, exchange of opinions on the measures required with particular attention to the four following aspects of universalisation of education:

- access to the various levels of the education system;
- progress in literacy - the oral rule in adult education;
- suppression of discrimination: men - women;

  rural zones - urban zones;

  economic;
- teacher education - appeal to informal structures.

Panel I

PRESENT STATE OF DEMOCRATISATION AND UNIVERSALISATION OF EDUCATION IN AFRICA

by Mr. B.J. Chimbunde, Zimbabwe

The winds of change have blown over Africa and have left in their wake far-reaching changes in the political, economic, social and educational milieu of the African people. The 20th century has seen the highest number of African countries attaining political independence. In the majority of cases, these political changes came as a result of a bloody revolution. In my country, Zimbabwe, the colonialists were so comfortable and cosy that nothing short of a protracted armed struggle would have wrestled political domination from them.

The colonial era and education in Africa

Pre-European Africa was characterised by an agricultural subsistence economy where education comprised a verbal method of handing on information from generation to generation in the familiar environments of the home and not in formal institutions like schools. The coming of the Europeans to South Africa purported to change the African's way of living and method of acquiring knowledge. The missionaries, in their effort to evangelize the locals, saw education as a pre-requisite to enable them to read the bible and subsequently teach other locals. For this reason, the vanguard of educational provisions was provided by the various missionaries in most countries.

Until 1940 in Zimbabwe, the government did not take direct part in African education. During the period of Federation in Zimbabwe, a little more interest was shown in the education of the African as a result of pressure from African politicians and the policy of partnership of the ruling party of that time. The 1951 Kerr Commission noted that there were bottlenecks and ineffective village schools with 70.5% untrained teaching force. The recommendations of the Kerr Commission resulted in the five-year plan for improving African education, which is:

(i) a broadly based primary system with five years of education for all to achieve universal literacy;
(ii) expansion of upper primary schools so that more children could complete a full 8-year primary course;
(iii) extensive expansion of teacher training.

The 1966 - 1971 plan proposed radical changes and phenomenal expansion in the Africa educational system. The Minister stated the aims as follows:

(i) a full seven-year course of primary education for all beginning in 1969;
(ii) a two-year post primary vocational preparation course - which was 37.5% of grade seven-leavers;
(iii) a four-year course of formal academic secondary education - 12.5% of grade seven-leavers;
(iv) provision of correspondence courses for 50% of the grade seven-leavers;
(v) improvement of teacher training programmes. All in all, the education system in Zimbabwe under the colonial rulers was designed to educate only a few Africans.

On the other hand, education for Europeans was compulsory to the age of 16. Although the population of Africans exceeded Europeans more than tenfold, in 1971 there were 26,077 African secondary school students compared to 26,839 European students. The government spent 2.5 times more money on European education for almost the same number of pupils. I believe the Zimbabwean story is similar to the stories of education in other English-speaking countries. In the Zimbabwe pre-independence period the bias in favour of settlers and urban centres was very clear. In such urban centres 62% of all children of school age attended school, whereas only 44% of children of school age found secondary places in rural areas.

Present state of democratisation and universalisation of education in Africa

In virtually all African countries the desire to universalise education has been the hall mark of the post-independence activities. Indeed in Zimbabwe, Tanzania, Kenya, Ghana, etc. primary education is largely accessible to all. To ensure that this is done in Zimbabwe, all rural areas have been adequately provided with schools. The increase in the number of schools accounts for the phenomenal rise in the number of primary school students in 1978 from 829,039 to 1,608,143 in 1981 and to 2,044,847 in 1983. The independence government of Zimbabwe has virtually democratised education in the primary school. They started by making primary school education free and then built schools wherever they were needed.

A similar expansion has taken place in the secondary school sector. The enrolment of 73,026 in 1978 has rocketed to 145,363 in 1981 and to 316,438 in 1983. Almost every primary school leaver can find a secondary school place.

In Kenya after the Presidential Directive of 12th December, 1978, milk was provided free to all primary school students. Primary education was also free. This move enabled more people to go to schools - a move to universalise education. The introduction of harambee Institutes of Technology made post-primary education available to more people.

In Botswana, apart from efforts by the government to universalise primary education, the role of brigades has been most outstanding. It not only speeded up rural development but also made the learning of skills vital to rural and commercial development of the country more accessible to a number of people who would otherwise drop out of the school system.

It is perhaps important to pause at this stage and find out why African countries have to universalise education. The new rulers must ensure their political and economic survival and that of the people that elected them. They must learn to safeguard food and water supply, to husband natural resources to combat disease and malnutrition, to forestall population explosion. An educated people will tend to prevent these disasters more easily.

In Tanzania, the Arusha Declaration propounded by President Nyerere stressed among other things self-reliance, development of literary and numeracy, social and human equality and the cultivation of skills, values and attitudes necessary for good health, hard work, and better life in the Ujaam village - a clear move to take education to the grassroots. Although this idea may not have produced the expected results quickly enough, the concept of the integration of the school with the community has been firmly rooted in Tanzania.

In Uganda, the Namutamba Rural Education Project in 1967, sought to bring the school closer to the community and thus democratise education in schools. Although Uganda may find it difficult to implement the results of this experiment, it has certainly helped other African countries to use the results.

The various moves to democratise education are fought with difficulties. It is not always easy to make education readily available to the majority of people. The phenomenal expansion of both primary and secondary education in Zimbabwe has triggered off the following problems:

(i) shortage of suitable qualified teachers;
(ii) lack of sufficient space in existing schools;
(iii) shortage of supervisory staff;
(iv) insufficient funds to carry out the whole project.

These problems have been stoutly tackled. More untrained teachers have been employed. New methods of teaching such as ZIMSCI have been introduced to help the untrained teachers and to cut down on costs of providing conventional laboratories. Teacher training programmes have been accelerated and modified to enable teachers to train on the job such as ZIMTEC programme.

In other African countries different methods of training teachers quickly have been devised. In Ghana, seven former teachers' colleges were set aside for in-service courses. In Botswana, college in-service teams travel to remote areas to conduct courses there. Nigeria has mobile teacher trainers while Swaziland employs a system of in-service assignment while the trainees are closely monitored by college tutors. Lesotho has a special training of teachers.

To sum up, English-speaking African countries have universalised and democratised education by:

(i) expanding primary education to provide places for all who want to go to school. Most of these countries offer free primary education;
(ii) phenomenally expanding secondary education to prepare more people for the manpower needs of the country;
(iii) institutionalising and expanding adult and non-formal education programmes;
(iv) launching new forms of post primary education such as harambees, brigades, etc.;
(v) introducing special teacher training programmes to combat the problem of teacher shortages due to rapid expansion.

In conclusion, it is clear that all the English-speaking African countries have, at independence, made a special effort to universalise education as a means of conscientising their people in order to better prepare them for the important role of nation-building and development. The racial intrigues and snares set up in education by the colonialist must be carefully unravelled. The population should not only be literate but also highly trained to be able to proudly take their place in commerce and industry and in civil service job in fair competition with their former colonial masters. By and large most African countries have succeeded remarkably.

I have deliberately left out South Africa (Agama) in my discussion as its education of the black population still bleeds under the strain of the apartheid policy - a colonial policy that regards the blacks and their education as a second-rate consideration.

VIVA AFRICA!

Panel I

STATUS OF DEMOCRATISATION AND UNIVERSALISATION OF EDUCATION

by J. Ngoue, A. Melingui, M. Gwanfogbe,
Representatives of the Government of Cameroon

The objectives of democratisation and universalization of education, which have been repeatedly reaffirmed, in particular at the regional conferences held at Lagos in 1976 and at Harare in 1982, are still relevant at this time, when Cameroon and most of the African countries are completing their first quarter-century of independence and are preparing to embark on the last fifteen years remaining until the year 2000. The initial objectives - democratization and universalisation of education - have been broadened in the course of various regional conferences on education organised by Unesco, with the cooperation of the E.C.A. and the O.A.U. The following aspects have been identified:

- basic education for mass education;
- lifelong education;
- simultaneous education of young people and adults;
- reform of the educational system for better adjustment of education to the socio-economic system;
- establishment of effective and concrete liaison between education and productive work.

In its efforts to ensure for all citizens the conditions necessary for their development, the State of Cameroon sees democratisation and universalisation of education as being an option aimed to eliminate inequalities between individual persons.

Furthermore, it has not lost sight of the role that can be played by basic education open to the general population in developing patriotic values and insituting democracy. The Cameroonian school, with curricula that are - or are being - harmonized nation wide will undoubtedly constitute a crucible from which will emerge a new Cameroonian society, more united and more integrated. Curricula are designed to acquaint young people with other cultures, thus introducing them to international understanding which is a warranty of peace between peoples and nations.

Beyond those objectives, the Cameroonian school aims to train managerial personnel, greatly needed by the producing sector.

These education objectives are justification of Cameroon's decision to democratise and universalise school.

I. Traditional or institutional education

(a) Some demographic data

Cameroon is a country where population growth is rapid - the average annual growth rate is between 20 and 21%. In addition, its population is very young, 43.4% being under 15 years of age. The demographic explosion therefore affects expansion of schooling, making it difficult to achieve the objective of democratisation of education that Cameroon has set itself, together with other countries of the region. More than half of the population - 52.6% - is still illiterate, the proportion being higher for women than for men: 64% as against 36%.

(b) Rapidly developing school-attendance rate

In this section, the trend in school attendance concerns only traditional education, also termed formal education, in State schools or private schools, whether or not denominational but excluding Koranic schools.

The school-age population receiving traditional education is progressing at an increasing rate. The school attendance rate increased from 34.3% to 67.5% between 1960 and 1981. Today, more than three-quarters of the school-age population attend school. Although this remarkable increase in school attendance places Cameroon in the group of countries with the best school attendance rate, the situation still falls short of the objective that the countries of the region set themselves at Addis Ababa in 1961. Indeed, the school attendance rate conceals great disparities, for it can vary according to sex (although this gap is narrowing), the degree of urbanization and the region concerned.

(c) Recent expansion of pre-school education

The development of pre-school education is a recent phenomenon. Prior to 1972, education services for young children were within the purview of three ministries: the Ministry of Health, the Ministry of Youth and Sports, and the Ministry of Education. Coordination of the various activities of the three ministries proved very difficult. The development, organisation and supervision of this type of teaching made it necessary in 1972 to transfer responsibilities from the Ministry of Health and the Ministry of Youth and Sports to the Ministry of Education.

Young child education is divided between two types of institutions: child care centres and nursery schools. Because of the fact that the Ministry of Education took over responsibility for pre-school education fairly late, there are not enough schools and the teaching is inadequate in quality. In addition, these facilities are situated in urban areas exclusively, thus increasing the inequalities at the beginning of primary school as between children from urban and rural areas.

Despite the inadequacy of pupil places, school numbers are increasing very rapidly. The recent development of large cities in Cameroon is making it necessary to establish more child care centres all over the country, thanks to private initiative. These facilities will increase in number in the coming years, requiring appropriate organisational arrangements.

Since the serving staff in nursery schools are largely without formal training, the quality of education there is affected. Because of these shortcomings, there is a growing trend toward privatisation in the larger cities. Parents rush to enrol their children in certain private establishments offering better staff supervision.

(d) Primary education

To evaluate progress made in school attendance at the primary level, it is useful to review developments in the light of the objectives which the countries set themselves at the Addis Abeba regional conference in 1961. The participating States agreed to ensure an expansion rate of 5.6% for school attendance at the primary level. Over the period 1965 to 1983, the average annual growth rate in school attendance was 6.2% for Africa as a whole.

The average annual growth rate of new enrolments tends to be lower than the average annual growth for school attendance as a whole. This is attributable to large number of class repeats in primary schools, together with the fact that more and more pupils complete the primary cycle.

The relatively mediocre results achieved in primary education are also attributable to overcrowding of classes. At national level, the teacher/pupil ratio is one teacher for 49 pupils, with wide disparities from one region to another. Overcrowding of classes is further aggravated by sometimes irrational teacher postings. There are many more teachers in towns and cities where there are frequently two to three, or even four, teachers per class. In rural areas, on the other hand, one can frequently find full-cycle schools functioning with two or three teachers.

Post-primary education

Because many of the children enrolled abandon their studies at the end of the primary cycle, post-primary education was developed during the 1970s, comprising rural crafts section (SAR) and home economics sections (SM). The aim is to offer two years of training upon completion of primary studies to young people of either sex who are beyond the age for admission to regular secondary education.

SAR education is mainly vocational, allowing young people to spend two years learning masonry, carpentry, pottery, basket-work, agriculture, animal husbandry. The SM teach home economics and sewing. Young people who attend these various courses are better able to integrate themselves in rural life, being equipped to improve their living conditions.

Only 0.4% of the school population are in post-primary education. The number of establishments is developing very rapidly: from 37 SAR and 21 SM in 1974/75 to 110 SAR and 71 SM in 1982/83, reflecting the importance that the government attaches to this type of vocational training.

(e) Secondary education

1. General secondary education

The increasing share of general secondary education in total primary and secondary school population can be seen in the increase in secondary pupils in relation to primary pupils, though with a slight decline in 1982/83. There is some overcrowding in lower and upper secondary classes because numerous class repeats. This also shows that more and more pupils are completing their education cycle. The teachers are better qualified than at the primary level. More than half of them have a qualification higher than the school-leaving certificate.

2. Technical education

Generalisation of technical education was among the objectives of both the IVth and Vth five-year plans. Yet the share of technical education in secondary education as a whole is still limited and seems to have made no progress from 1970 to 1980.

Within technical education, there is some imbalance between industrial technical education (36.5%) and commercial education (63.5%) Pedagogical supervision of instruction is less good than in general education. Most of the teachers have no pedagogical training. It is estimated that more than three-quarters of the teachers have not pursued higher studies. Technical education is dominated by the private sector. 71.3% of pupils attend private establishments. Technical education seems to be very selective. The repeat rates in examination classes are far higher than in general education. Generalisation of this education will pose problems, the main one being a decline in yield reflected in class repeats and drop-outs.

The following summary of the problems noted above gives an idea of the obstacles encountered by efforts to democratise education and improve the quality of teaching. In particular, we note:

- inadequacy of school establishments and their concentration in a few privileged zones of each province;
- inadequacy of specialised premises and didactic materials, and poor maintenance of the latter;
- quantitative and qualitative inadequacy of staff;
- inadequacy of operating appropriations of establishments.

The campaign already launched to overcome poor yield of generalised education requires tremendous manpower and material resources, and structures that the State is establishing progressively.

II. Action taken to achieve democratisation of education

(a) Teaching staff

In order to generalise education, the State has had to recruit teachers on a large scale. In primary education, some 50% of the teachers have no diploma higher than the CEPE or the FSLC. Qualified teachers who include, according to Cameroonian standards, primary school teachers, assistants and general education teachers represent approximately 41%.

"In 1980, there were slightly more than 27,000 primary school teachers. On the assumption that the present ratio of one teacher to 50 pupils falls to one teacher to 40 pupils between now and the year 2000, and that in that year a school-attendance rate of 100% is achieved, 93,000 teachers will be needed in the year 2000 and 134,000 in the year 2010, if the present birth rate continues. This would represent an annual increase of 3,566 teachers in relation to present numbers."

(The Futures Group, Relationship between Demographic Factors and Development.)

As regards qualifications of teaching staff in general secondary education, the situation is similar to that in primary education. At the secondary level only 50% of teachers have a diploma higher than school-leaving certificate.

(b) Teacher training

To meet the pressing need for qualified teaching staff, numerous teacher-training establishments have been set up, in response to the State's concern to ensure general expansion of school attendance while reducing inter-regional disparities.

Student numbers in teacher-training establishments

The trend in student numbers in teacher-training establishments makes it doubtful that all teacher needs foreseen for the year 2000 can be met. The number of teachers is increasing more slowly than the rate indicated in the Action Group's projections - i.e. an annual average increase of 3,566 teachers in order to arrive at a school-attendance rate of 100%.

Having regard to the need for secondary-school teachers, soon after independence a higher teacher-training institute (E.N.S.) was established at Yaounde. It has an annex at Bambili.

The Yaounde E.N.S. and its annex at Bambili have played a remarkable role in generalisation of education. With the assistance of the various establishments of Yaounde University, the E.N.S. has, in the past twenty years or so, "Cameroonized" all the posts of professors of literature and the humanities. Similar action is currently proceeding in respect of posts of professors of scientific subjects. However, it has met with some lack of interest for teaching as a career among students completing their school education. Trainees for teaching mathematics and physics are often less numerous than the number of places offered for recruitment on a competitive basis. The results obtained in "Cameroonisation" of posts of professors of natural sciences are encouraging. If the average annual growth rate of pupil numbers levels off as from 1985 at 6.2%, in the year 2000 there will be 680,000 pupils in secondary schools, needing an enormous number of teaching staff. In order to meet teacher needs under the Vth plan currently in operation, provision is made for training 6,914 teachers, i.e. 1,383 per year. This growth in the number of teaching staff exceeds the training capacity of the E.N.S.

In order to remedy the shortage of technical teachers, teacher-training establishments for technical teachers (E.N.I.E.T.) have been set up, together with a higher technical teacher-training institute (E.N.S.E.T.).

The E.N.I.E.T. provide one- or two-year training courses for technical teachers who are then assigned to technical colleges.

(c) Financing of education and equipment

According to the educational curriculum planning and statistical service, education is financed by:

- the public sector, including the Ministry of Education and other ministries;
- local collectivities, which furnish land, some equipment and even build class-rooms;
- families which participate by paying the school fees of children who attend private establishments. It should be noted that school fees would be beyond the means of most parents, if the State did not contribute to the operations of private establishments by granting subsidies. Families sometimes participate directly in the construction of school infrastructures.

A substantial share of the national budget goes to the Ministry of Education: 10 to 12% over the past ten years.

Investment credits represent about one-third of the credits allocated to education during the past ten years. This share of investment credits reflects the efforts the State is making to construct numerous infrastructures.

School equipment has increased appreciably over the past twenty years of independence of African countries thanks to the combined efforts of the State, collectivities and individual citizens. As a result the number of schools has increased.

But the increase in equipment has not kept pace with needs, particularly in urban areas. The intake capacity of existing establishments is exceeded before consideration is given to building other ones. In the long term, new schools fail to remedy overcrowding in old ones. In urban areas, it is difficult to find sites for new schools, and nearly all of the latter are situated in outlying districts. Excessive concentration of schools in certain parts of the town to the detriment of others is an obstacle to the effectiveness of educational action.

School furniture and didactic equipment is inadequate in quantity. Where didactic equipment exists, it is poorly maintained and deteriorates rapidly. There is generally no replacement of outdated equipment.

Certain reforms, in particular the introduction of technology, have made it necessary to build specialized classrooms in the C.E.S. (lower secondary schools). These special classrooms have very soon ceased to serve their original pupose. Pupil numbers have grown so much that special classrooms have been turned into ordinary classrooms used on a full-time basis. Equipment from them has been stored in an office or in the teachers' room where it has deteriorated rapidly. This problem is not limited to those schools. In many upper secondary schools, any laboratories and libraries very soon cease to be used for their original purpose and become ordinary classrooms. One cannot remain indifferent to the decline in the level of teaching of science and technology that results from this situation.

(d) Democratisation and improvement of the quality of teaching

1. Seeking to establish an African school

School today is characterised by low yield. What becomes of the more than 800 young people who abandon their primary studies during or at the end of the primary cycle? As is to be expected, these young people cannot integrate themselves in country life, nor can they find a job in town commensurate with their aspirations, because they have had no vocational training. For most pupils in their 6th year of school, long hours of academic courses have given them a taste for idleness. Being unable to integrate themselves in rural life, they join the rural exodus that has caused a population explosion in the towns and cities.

In this situation, should one turn one's back on mass education and continue to train a minority elite through rigorous selection and great expenditure? Certainly not. While continuing to expand educational facilities by providing premises and equipment and training teachers, the State is endeavouring to improve the quality of teachers and to correct certain distortions in today's school by setting up new structures.

Various bodies are engaged in research with a view to bringing about the innovations and reforms needed for adapting our education system to the African context. In Cameroon, we may mention the Rural Pedagogical Institute (IPAR), the National Education Centre (C.N.E.) and the Inspectorate-General of Pedagogy.

The activities of these three bodies are based on the three major principles that have been reaffirmed on many occasions, namely:

- ruralisation of primary education;
- development of bilingualism;
- strengthening of national unity.

2. Pedagogical innovations and reforms

Ruralisation of education

Manual work was first suppressed in 1945, then reintroduced into school curricula in 1963. The primary school curriculum includes three hours of manual work per week.

To overcome difficulties of inadequate training and motivation of teachers, material problems, opposition from pupils and certain parents, the rural teacher-training institutes (E.N.I.R.) were created in 1967. Their training activities have been taken over by the Rural Pedagogical Institutes set up in Yaounde and Buéa respectively in 1969 and 1973.

Regulatory measures have been taken to deal with the stagnation of agricultural production and the increasing maintenance costs of school establishments. In 1975, a joint Order by the Ministry of Education and the Ministry of Youth and Sports made manual work cumpulsory in the schools of Cameroon. Manual work became a subject in the full sense. Following that Order, it was even introduced in secondary schools. Two hours per week are devoted to manual work in all classes. It carries coefficient one in three-monthly ratings. It has even been introduced in the B.E.P.C., but because of the absence of qualified teachers, the Ministry of Education has had to suspend this examination for the time being. It should be underlined that manual work plays an appreciable role in the maintenance of school premises.

To encourage competition between schools, a Prize for Manual Work has been established to reward the most deserving establishments.

Changes in curricula

The various primary curricula for 1960 and 1965 underlined the need to adapt primary education to our realities, hence the emphasis laid on production-oriented manual activities.

The primary education reform has reaffirmed this concern to ruralise basic education. The new programmes, which are to transform primary education in line with fundamental options, will be implemented during the 1984/85 school year, in principle. Many innovations have been introduced in secondary education, which is becoming fairly flexible and democratic as a result of the creation of various streams: whether focussing on literature, economics, science or technology, these streams allow each pupil to develop his particular abilities. In all subjects, curriculum innovations have been adopted in order to update them or adapt them to the African context. The history and geography curricula adopted at the Conference of Ministers for Education of the French-speaking African countries and Madagascar in 1967 made increased provisions for study of Africa in all its specificity.

Having regard to the need to continue civic instruction of young people at the secondary level, it has been introduced into curricula as a compulsory subject. The civics curricula originally drawn up in 1973 were updated in 1979. For French, new curricula have been introduced which include the study of African-negro literary works. Innovations in regard to mathematics have included the preparation and adoption of curricula adapted to the Africa socio-cultural context. Adoption of new curricula has been followed by the preparation of record-cards for first cycle classes. Numerous ministerial circulars have been issued to define the spirit in which to approach mathematical concepts so as to make them accessible to a greater number of pupils. Re-training courses have been organised to familiarise teachers with the use of these record-cards. Innovations have come much later in technical secondary education, but over the past three years a far-reaching reform programme has been launched in regard to both vocational and general subjects. Pupil results will undoubtedly be improved as a result of the forthcoming adoption of curricula still at the experimental stage.

Generalisation of bilingualism

Introduction of a second language at the primary level in 1975 marked a decisive stage in generalising bilingualism that is particularly relevant to achieving national unity.

Generalisation of bilingualism soon came up against the shortage of teachers and methodological auxiliary facilities. Two schemes had to be set up, one for the teaching of French as a foreign language in collaboration with the Applied Linguistics Centre of Besançon, the other for the teaching of English as a foreign language with the assistance of the British Council. Under these schemes, instruction and training methods for teachers have already been drawn up and books have been prepared for teachers and pupils.

Promotion of national languages

Because of the difficulty of educating country children in French or English, study groups have examined the problem and have suggested that their education should be in national languages.

The operational research programme for language teaching in Cameroon (PROPELCA) has suggested the following stages:

1. Pupils should learn to read and write in their mother tongue and in parallel learn oral expression in the first official language;

2. Pupils should learn to read and write in the first official language.

These suggestions have not yet been tried out officially. Use of national languages is probably not practicable because they are so numerous. Caution is undoubtedly necessary because their use could serve to perpetuate particularisms. The only experimental activities in this area have been organized by private initiative.

Strengthening national unity through generalised education

Generalisation of education contributes to strengthen national unity. An educated people is fully aware of its destiny. The school community is seen as a privileged meeting-place for various human groups. Establishment of national curricula adapted to national realities and their introduction in all schools, are an excellent means of achieving unity. Harmonized curricula which are currently being introduced at the primary level will speed up the unifying process.

Civic education curricula are already contributing, in the context of education open to all, to the development of civic, patriotic and moral values.

As already underlined, bilingualism in schools is a uniting factor. It is conducive to national understanding, overcoming cultural barriers inherited from our colonial past.

While pedagogical innovations and reforms improve the quality and highly selective character of formal education, they do not solve the problem of democratic education adapted to the production needs of an essentially agricultural country.

III. Non-formal education

African countries anxious to integrate the masses in producing circuits have been turned away from conventional education by the numerous losses recorded in the formal education system by reason of drop-outs or class-repeats. They seem to be placing their hopes in training outside the school environment. Cameroon has established various bodies for the supervision and vocational training of the masses and the handicapped.

(a) The National Civic Service for Development Participation

This Service was set up in 1973, and became a Board one year later, with the aim of checking the rural exodus and encouraging agricultural production which was in a period of stagnation. It comprises six rural central centres and three urban centres.

Its objectives are the following:

- to secure jobs for young people in producing sections;
- to give moral, civic and vocational training;
- to develop a spirit of initiative in order to encourage participants to establish rural work opportunities;
- to mobilize the work capacity of young people for activities in the common interest.

In rural centres, participants are introduced to modern cultivation and animal-husbandry practices. After the training period, they are reintegrated in their village of origin or in pioneer villages of the Board, which provides them with basic equipment and organises follow-up through regional bodies (SOCOODER, SODECAO,SODENCAM, SODECOTON, etc.).

The urban centres provide participants with practical training in electricity, motor-vehicle repair and maintenance, home-economics, carpentry, sewing, handicrafts, etc.

The Board's record is very encouraging. By 1980, it had already trained 3,054 young people. Many young people trained by the Board have distinguished themselves in competitions at the departmental and provincial level.

(b) The National Vocational Training Centre (established in 1981)

Intensive training courses are currently available for: electronics, electrotechnics, general engineering, metal-working, civil engineering, motor vehicle repair and maintenance, etc. The Centre offers training courses in all these specialities to meet the needs of Cameroon's economy.

c) The "Education and Training on a Cooperative Basis" Project

This Project is being conducted under the responsibility of the Ministry of Agriculture.

It aims to promote development of the cooperative in the farming world, as a means of achieving socio-economic change and improving village communities.

It has a two-fold objective:

- training members of cooperatives and elected officers of cooperatives;
- training of supervisory personnel.

(d) Overcoming illiteracy

The first literacy campaign was launched in 1962 under the title "School under the Tree". The nation-wide campaign started in 1967 on the occasion of the inauguration of the pioneer village of Pitoa-Langui.

The aim of literacy programmes is to teach the rural population basic elements of reading, writing and arithmetic in order to build up a human resource able to understand development tasks.

After having been very popular between 1964 and 1968 - 7,500 literacy centres were inventorized - the campaign became relatively less active. In 1978, there were only 336 centres.

There are a number of causes for this decline, including the following:

- desertion by voluntary helpers;
- lack of didactic materials;
- decline in motivation among adults because of disappointed expectations;
- conflicts of responsibility among the three responsible bodies.

Committees which have evaluated results have recommended the use of national languages to remedy the decline in literacy programmes.

(e) Agricultural training

The Ministry of Agriculture has an agricultural extension service which follows up and supervises the practical application of the training programmes for agricultural workers organised in the Rural Training Centres operated by the State and the private sector.

The agricultural extension service offers taining facilities for agricultural workers in six Rural Training Centres where training sessions lasting ten to 15 days are organized for small groups. In addition, its teams of travelling instructors organise sessions in villages.

Propagation farms have the task of supplying farmers with selected seeds and seedlings in order to improve yields. They also offer advisory assistance on the use of draft animals in cultivation.

Educational activities in favour of the handicapped

The National Rehabilitation Centre of the Handicapped is specialised in the functional rehabilitation of children affected by poliomyelitis. The Bullu Centre for the Blind is primarily concerned with training blind people. The intake capacity of these two centres is not sufficient to meet requirements.

In this sector of non-formal education, State education is supplemented by numerous private initiatives.

The National School for Instructors and Welfare Assistants furnishes specialised personnel for all activities in favour of the handicapped. In addition, it carries on research regarding prevention and treatment of disabilities, and public information on activities undertaken in favour of the handicapped.

Conclusion

In 1983, democratisation and universalisation of education remains a challenge to be taken up by Cameroon and the African countries as a whole.

The new school, as shaped through the innovations and reforms now taking place, has a two-fold role:

- to dispense education such as can allow greater number of young people to adjust to their environment and integrate themselves in producing sectors through appropriate vocational training;
- to give the most talented pupils the possibility of continuing their studies as far as possible.

The characteristics of this school which should be open to all by the year 2000 are:

- adaption of curricula to national and African realities;
- pursuit of general objectives by curricula for the various subjects (ruralisation of education, strengthening of national unity and bilingualism), together with specific objectives;
- bilingualism, necessary for nation-wide understanding;
- opening to other civilisations, necessary for international understanding and for raising the cultural level.

The renewed Cameroonian school as reflected in these characteristics can be seen to be very complex. The basic education, aimed at insertion in producing sectors of the rural community, that it proposes to offer to everyone opens an upward path for particularly gifted pupils. Thus, it does not lose sight of the need to train managerial personnel. Insertion in producing sectors is not the end purpose of education, which also gives attention to cultural advancement.

The traditional school, even if renovated, will continue to have losses. Young people who abandon their studies or fail to obtain an end-of-cycle diploma are not to be left by the wayside; vocational training facilities are being provided for them in the context of non-formal education.

The combined action of formal education and non-formal education will make it possible to achieve democratisation and universalisation of education by the year 2000. Forecasting is risky in the area of education, for school does not develop in isolation - there is interaction between it and the environment. Access to basic education for all Cameroonians by the year 2000 will depend on the evolution of your country's political, economic, social and cultural system.

BIBLIOGRAPHY

Ministry of Education	National Report on Education in the Cameroon and its Development Prospects, Yaounde, February 1982
Ministry of Education (DPOES)	General Data on Schooling by Level and Type Education, Yaounde, 1982-1983
Mcugue and J. Beling	Orientation and Problems of Education in the Cameroon: A Synthesis - National Education Centre, Yaounde, November 1983
Conferences of Ministers of Education and Economic Planning of African Member States	Education and the Endogenous Development in Africa: Evolution, problems, prospects. Unesco, Harare, 28 June - 3 July, 1982
African Conference on Education	Must we change the African School? Why? How? World Confederation of the Organisations of the Teaching Profession. Niamey, Niger, August 1-9, 1981
Council of Higher Education and Technological and Scientific Research	Minutes of the Second Session Yaounde, 20-23 October 1982 SOPECAM
Central Census Office	Principal Results of the General Census of Population and Settlement in April 1976: Yaounde AGRACAM 1978
The Futures Group	Relation between Demographic Factors and Development. Yaounde, January 1983
Department of Statistics and National Accounts	Annual Statistical Note Yaounde 1982
Conference of Ministers of Education from French-speaking States	Seminar on the relationship betweem Training and Productivity in Formal Education Systems. Yaounde 4-9 April 1983

International Education Conference: 36th Session	Education Reforms and their evaluation. Geneva, 30 August - 8 September 1977
J. Ngoue	Prolegomena to an Educational Reform. National Education Centre Yaounde, 1976

Panel I

PRESENT STATE OF DEMOCRATIZATION AND UNIVERSALISATION OF EDUCATION IN AFRICA

by Mrs. Aimée M. Gnali, BREDA/Unesco

The 1982 Harare Conference of Ministers for Education and Ministers for Economic Planning of the member States of Africa found that the universalisation of primary education, targeted for 1980 under the Addis Ababa Plan, had not been achieved. There are two essential reasons for this:

- the real population of Africa was initially under-estimated;
- the population growth rate has been higher than expected.

Going farther than the Addis Ababa Conference, the Harare Conference has undertaken to achieve the democratisation and renewal of education in order to ensure that all Africans, whether children or adults, can fully exercise their right to education.

Is this realistic?

Situation in regard to primary education

As regards universalisation of primary education, the situation for the region as a whole is considerably better than is generally believed, because one still has in mind the old statistics. But if we look at Table I on page 8 of the Regional Programme for Elimination of Illiteracy in Africa, and at the accompanying comments on pp. 9 and 10, paragraphs 11 - 12 - 13 - 14, we find:

1. that notwithstanding the problems still outstanding, one third of the countries, with a school attendance rate of 90% or more, have virtually achieved universalisation of primary education;
2. that eight countries have a school attendance rate below 40%;
3. that the others have a rate between 40 and 74%, the regional average being 62%.

Exorcising the memory of Addis Ababa

One should, therefore, cast out the memory of Addis Ababa by referring to the following figures:

What was proposed:

1960 1980

$$\frac{\text{Attendance}}{\text{Population}} \xrightarrow{+\ 5.6\%\ \text{p.a.}} \frac{\text{Attendance}}{\text{Population}}\quad 100\%$$

Annual increase rate of 5.6%, achieving universal school attendance in 1980.

What actually happened:

1980

$$\frac{\text{Attendance}}{\text{Population}} \xrightarrow{+\ 6.2\%\ \text{p.a.}} \frac{\text{Attendance}}{\text{Population}}\quad 62\%$$

The effective increase rate has been 6.2% per annum, reaching an average school attendance rate of 62% for the region.

Future prospects

This regional average of 62% should, nevertheless, not cover up the disparities existing between member States and which call for a policy of generalising of primary education, modulated according to:

- the level reached in each country;
- the resources available;
- development priorities.

For countries in the first group

Which have achieved generalisation, it is no longer a matter of extending primary school attendance, but of renovating and democratising education.

> "Democratization calls for legislative, educational, social and financial measures to secure full equality of access to formal and non-formal education and full equality of prospects of success throughout the educational process, together with the participation of the people affected in the planning, implementation and evaluation of educational programmes". (1).

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(1) Unesco: Second Medium-Term Plan (1984-1989) Paragraph 2035

For countries in the third group

Which have a school attendance rate of between 40 and 74%:

(a) either they can be considered linked to the group 1 countries;
(b) or they can be considered linked to the group 2 countries;
(c) or they are in an intermediate situation.

For (a) and (c), solutions to be applied are similar to those of group 1:

- long-term planning;
- control of expenditure;
- democratization;
- generalisation of access;
- equal opportunities;
- adjustment to needs;
- participatory management.

For (b), they are similar to those of group 2.

For countries in the second group

Which have a school attendance rate of less than 40% and are also among the poorest ones (inter alia, all the countries of the Sahel except Cap Verde), the situation calls for far-reaching reforms, such as:

- structural reforms
- large-scale constructions of schools;
- improvement of the teacher/pupil ratio:
  - either be reviewing the principle of one teacher, one class;
  - or by double assignments, etc.;
- increased priority for primary education in relation to the other levels, in particular higher education, whose unit cost is 100 times greater than that of primary education;
- restructuring of costs of teaching staff:
  - either through recruitment at a lower level;
  - or by limiting increase of salaries;
  - or by arranging for salaries to be paid by local communities, etc.

PANEL I

The present status of democratisation and universalisation of education

SYNTHESIS OF THE WORKING GROUPS (A,C,D)

The Conference of Addis Ababa (1961), Lagos (1974) and Harare (1982) strongly underlined the need to develop education of young people and overcome adult illiteracy. They set as a target the generalisation, universalisation and democratisation of education.

The concepts of generalisation and universalisation simply refer to extension of educational and training activities to a broader school population. The objective is to ensure that all children of school age actually attend school. Democratisation of education is one element of its universalisation. It implies progressive elimination of all inequalities of opportunity in education. All children, regardless of their origin, have the right to education. Democratisation means breaking away from the elitism characteristic of school today as reflected in the Malthusian policy of "selection - elimination".

Examination of the school situation in the various States shows that more than twenty years after the conference of Ministers for Education at Addis Ababa, the promised objectives have not yet been attained. Indeed, democratisation has not been achieved anywhere (group C).

Democratisation and universalisation of education are nevertheless an imperative need. Wherever the experiment has been tried, oral teaching in national languages has proved very effective for the understanding and assimilation of subject matter. This kind of teaching in national languages should be extended from infant school to primary school and to adult education. In this oral teaching in national languages, one should also make use of the traditional African methods which should be the subject of research in order to pinpoint them (group A).

As regards universalisation of education, governments should ensure generalisation of access to education, free of charge, for the six first years of primary education. They should ensure that more and better primary schools are available. Children leaving primary school should have the possibility of continuing their studies according to their aptitudes and wishes (group D).

Universalisation - the logical outcome of generalisation - presents the following characteristics: in some ten African countries, national efforts have resulted in a school attendance rate of 75% or more (threshold of universalisation of education), 19 countries have been able to achieve a rate of 40% and 15 countries are still below that figure (group C).

As regards education of women, a rapid solution is needed to the problem of sexual discrimination. It is essential to guarantee them equal opportunities for access to education and to develop activities. Education must be compulsory for everyone and women must be able to study subjects leading on to all types of career. Stereotypes must be eliminated from school manuals, and school activities must be made uniform (boys and girls) (group A and D). One must struggle against negative forces (e.g. parents who do not want to see their daughter attend school). Sexual education must be given by school, the family and society in order to overcome certain taboos and help girls to avoid certain incidents (e.g. pregnancy at school) detrimental to the future of women. One should fight against early marriage of girls through education and by setting a minimum school-leaving age for compulsory education. To some extent, one can speak of self-discrimination on the part of women: they ought to use existing political, trade-union and female organisations in order to overcome their fatalism and claim the rights to which they should be entitled by active participation in the decision-making process (group A).

Education strategies should aim to ensure access to education for everyone, correcting disequilibria between men and women (group D), between the different regions of the country, while linking education to working life and to the country's labour requirements (groups A,C,D).

Resistance to innovations is essentially of an economic nature (inadequacy of school premises, high cost of didactic materials, equipment and teaching staff, resistance from parents). It can also be of a socio-economic character. There is a growing feeling among pupils and their parents that school has become incapable of ensuring the future of school-leavers. Some reticence is of a socio-cultural character: unwillingness of nomad children to settle down, numerous drop-outs because of early marriage of girls. The existing educational systems result in discrimination between areas (rural and urban), ineffective integration of manual work, inadequate teacher-training policy (group C).

Numerous possible measures to remedy the situation

- Courses dispensed in post-primary institutions should be oriented towards national development, and counselling services should be available to help students make their choice. University courses must be in direct relation with the country's workforce needs (group D). Basic education must be given priority at school, it must be in harmony with the environment, and curricula must be designed to transform the African child and his environment, and allow their integration and harmonious development (group C).

- State expenditure can be reduced through participation of local collectivities, mobilisation of private resources, utilisation of resources from productive work at school (groups A and C), development of alternating classes and utilisation of all ministries having responsibilities in relation with education and training (group C).
- It is appropriate to secure confidence in national supervisory personnel rather than pay for very expensive cooperation staff from other countries. Unnecessary expenditures can be avoided through better management of funds, and accurate evaluation of the cost of education. Teaching national languages can contribute to shorten the duration of education (group A).
- The reforms envisaged should make provision for education of the handicapped and social misfits, develop the campaign against illiteracy as a component element of school activity, develop lifelong education, in particular through media utilisation. They should be based on use of national languages as the teaching medium, together with a clearly defined linguistic policy. Their use in everyday and official life should be encouraged, as should inter-African cooperation for the production of school manuals and didactic materials for development and fundamental research (group C).
- In their efforts, governments should request the participation of teachers' organisations, parent/teacher associations, the community and private enterprise at all levels of the process of planning and implementation. Governments should give special attention to non-formal education by intensifying their efforts in regard to training teachers for adults, and education outside the school environment (group D).

Teachers

The reforms envisaged should make ample provision in regard to teachers, by raising the level of recruitement and thereby the level of training, extending the duration of training, and implementing an adequate training programme. The status of teachers should be revalorised through introduction of deontology making it a model, a bench-mark in society, by ensuring a teacher's elementary needs (housing, social welfare coverage, decent salary) (group C).

In order to avoid young people's mistrust in regard to teacher-training establishments, and abandonment of the profession by serving teachers, the living and working conditions of teachers need to be improved. It seems essential to make provision for lifelong training in addition to initial training. The teaching staff in teacher-training establishments should be familiar with the urban and rural situations in which their graduates will be working (group A).

Educators should be viewed as being a powerful tool for promotion of democracy - democracy that would make a man aware of his political and civic responsibilities, in his duties toward his family, and would make him capable of playing an essential role in his community (group D).

The campaign to eradicate illiteracy must be planned without reliance on the unpaid services of teachers who are already overworked. A national illiteracy-eradication fund should be set up (to which private enterprise would also be invited to contribute). Governments should take the initiative of setting up bodies with particular responsibility for illiteracy eradication and specialised in operations of this kind (group A).

INFORMATION AND REMARKS THE PANEL THEME

Panel II

Role of scientific and technological education in the African School

Define the current role of these disciplines in the African school, and the possible forms of resistance that their introduction into the school would encounter (traditions).

Report on concrete examples of successful introduction of technology.

How should this education be adapted to necessity and national, regional and local needs and realities?

How should teaching of these disciplines be integrated into other parts of the programme so as to avoid compartmentalisation.

Should education concentrate on present technological development in the country or could it be forward-looking and anticipate future development?

How should continuity between traditional technology and new technology be established?

Who should teach technology? Should one, or can one, count on collaboration from persons outside the school?

Panel II

THE RÔLE OF THE TEACHING OF SCIENCES AND TECHNOLOGY IN THE AFRICAN SCHOOL

Presentation by A. Fomethe, L. Mukam, L. Ngouo,
Representatives of the Cameroon Government

It is a commonplace to assert that the school inherited from colonialist days was unsuitable in the African context. In fact, there is no doubt that the colonial school system was intended primarily to produce the indigenous subordinate personnel required for the smooth running of the colonial administration and the exploitation of the natural resources of the colonised territories.

Since that very time the young African has been torn between conflicting influences, being the product of a cultural system which is totally different from that in which he will have to work. The first system, called traditional, is characterised, as well known, by dependence of the individual on the group. The second, called modern, on the contrary, requires independent individuals endowed with a spirit of initiative.

Now the education offered until that time, whilst placing emphasis on memorising and speech, did not prepare man for development, nor did it imbue him with the idea that he is able to influence the environment and provide a certain degree of technical and economic independence.

In the wake of independence, African countries were to be confronted with the widespread problem of almost total illiteracy. Faced with this problem, the first Conference of Ministers of Education of the African States, held in Addis Abeba in 1961, adopted a Recommendation calling for the universalisation of education in these countries.

Indeed, in order to fill the gap left by the coloniser, these new nations had to train quickly and in large numbers the various agents they needed for their economic, social and cultural development.

At the second Conference of the African Ministers of Education in Nairobi, in 1968, it was further decided that stress was also to be placed on the quality of education.

At the Lagos Conference in 1976, three new options were outlined, namely:

- the link between the economy and the community
- the link between school and productive life
- the reinforcement of the African cultural identity.

Finally, at Harare in 1982, the Conference of the African Ministers of Education and of officers responsible for economic matters without renouncing any of the options previously taken, recommended intensifying the teaching of sciences and technology in school.

Thus, in the current orientation of diversification of educational policies in Africa, scientific and technical education occupies a central, if not a privileged position, in that it is stressed that its contribution is a determining factor for solving the new problems faced by the economic, social and cultural development of the countries concerned.

Before assessing the extent of the role which science and technology may play in Africa, it is first necessary to identify or describe the problems which they may help to solve.

I. The African countries faced with their problems of development

The development problems confronting the African States are numerous and varied.

1.1. On the human level

The underdeveloped countries, in this case the African countries, are characterised by their state of poverty. According to Albert Baez (1977), the fact of being poor involves "malnutrition, protein deficiency which may involve cerebral lesions in children, gnawing hunger, famine, lack of medical care, poor health, illness, pain and suffering, illiteracy, unemployment, apathy and despair". To this list may be added acute housing problems, educational problems expressed in terms of underschooling and inadequacy or even absence of supervisory staff.

Despite the progress already achieved in the health field, at national, regional and international levels, the average rates of mortality and morbidity are in fact still higher in Africa than in the developed countries. And most of the diseases have their origin in ignorance of the rules of hygiene, famine and malnutrition.

These problems associated with the living conditions are compounded by those relating to certain aspects of the African mentality, which are expressed in terms of beliefs in practices which run counter to Cartesian reason, and hamper action towards development.

1.2. On the economic and industrial level

The transport infrastructures, which favour inter-human exchanges, the circulation of goods and the establishment of industries, display huge inadequacies.

Industry, where it exists, is at the embryonic stage. Yet Africa is blessed with natural resources and raw materials which are both abundant and varied, such as forestry products, medical plants, ores, petroleum and various sources of energy. But they remain insufficiently tapped, even untapped, due to a lack of the necessary human resources, despite an extremely dense population. In fact, the competent scientists, engineers and technicians who are essential if these resources are to be identified and developed are still missing.

Despite their scientific and technological backwardness, the African countries are by no means sheltered from the influence exerted by modern science and technology throughout the world.

Indeed, most Africans nowadays daily consume products or enjoy facilities resulting from scientific and technological progress, but they are generally ill-informed consumers. As far as the use of imported goods is concerned, Africans are confronted with a serious problem relating to the maintenance of equipment. It is often the case that machines are declared out of use and scrapped when it would still be possible to recover, repair or reuse them.

Africa must also tackle the problem of its rural areas, characterised by farming and breeding practices using exhausting non-mechanised methods.

It may be concluded that the African countries have real needs, particularly with regard to:

- self-sufficiency in food;
- health services;
- development of basic infrastructures;
- independence in energy;
- development of a scientific and technological spirit;
- industrialisation and tapping of natural resources.

IMPORTANT NOTE

Solving all these problems necessarily involves the training and education of men and women, and school represents a privileged place for this purpose.

But it is nevertheless remarkable that these problems are specific not only to the African countries, but to all countries which have not yet succeeded in mastering science and technology. Moreover, studies are demonstrating that countries which have been the centre of major developments in science and technology, over the last hundred years, do not face problems of survival or essential needs, and are recording the same advance in their economic development. Thus there is every indication that there is a positive correlation between the degree of development in science and technology on the one hand, and socio-economic development on the other.

The definition of science and technology may certainly enable us to understand this situation. In fact, according to the dictionary, Science is "an exact, universal and verifiable knowledge, expressed by laws", whilst technology is "the study of scientific techniques, tools, machines, materials, electronic components" used for investigating and transforming nature.

Up till now, science and technology are, respectively, the most reliable and most operational rule and means of action available to man for appraising and transforming the world. Consequently, in order to be relevant, the training of human resources should be directed largely towards mastering science and technology.

II. Science and Technology in the African School

In this report we shall confine ourselves to two levels of analysis of the role of sciences and technology teaching in the African school, namely the general purposes and objectives of this teaching.

2.1. Main purposes of scientific and technological education in the African school

The Harare Conference in 1982 strongly emphasised "the need for education, as a factor of self-development, to integrate in African culture science and technology, mastery of which controls that of the development processes in the modern world".

By laying stress on the teaching of sciences and technology in the schools, the African States intend to train men and women who are capable of mastering the tapping of natural resources and raw materials, of promoting agriculture with a view to increasing local production and of improving the quality of food, medicine, clothing, housing, domestic economy, transport and living conditions of the population in general.

By improving and expanding export oriented production through science and technology, it will also be possible to strengthen the foreign trade position of these countries.

A no less important purpose of the option thus taken by the African States lies in the training of researchers, scientists, engineers and technicians, not only to promote self-development, but also to ensure a more active participation in the advance of universal science, instead of always being consumers of its products. Therefore, science and technology teaching should be aimed at encouraging young people to embark upon scientific careers and producing creators and innovators.

In reality the basic idea underlying this option is specifically that of providing comprehensive training for the citizens of our countries by considering scientific and technological culture as an essential component of their profile.

Clearly, this mastery of science and technology must start at school, from the first level to the highest level, and must be continued throughout life, i.e. in the daily accomplishment of tasks entrusted to us, but particularly in the specific, local or collective approach to problems that life in society requires.

It is therefore a question of re-shaping mentalities in order to break with servile transposition of foreign socio-cultural, scientific, technological and academic values, not just to fall back on the traditional African values, numerous negative aspects of which have already been emphasised, but to create to conquer one's own identity between these two extremes.

Therefore the African school, far from merely being an institution intended to provide instruction, must also be, in particular, a place where national awareness is developed, a place where the future of nations is built, a place where the development of every child is guaranteed so that he may play an active part, conscientiously and objectively, in the economic, political, social and cultural life of his country. In this regard, as we have mentioned, the teaching of science and technology plays an essential part. Thus in view of its lofty and necessary aims, the objectives of this teaching are worth further clarification.

2.2. Main objectives of the teaching of sciences in the African school.

For the sake of convenience, the sciences should be divided into two categories:

(i) the so-called exact, or abstract sciences, which include the logico-mathematical sciences;

(ii) the so-called experimental or "abstract/concrete" sciences, which include the physical, biological, mechanical, medial sciences.

2.2.1. Objectives of the exact sciences

Bearing in mind the purposes of education, as forementioned, the teaching of the exact sciences in our schools should have the following objectives:

(i) promoting the emergence of a science-oriented mind, i.e. a mind which foregoes mystical beliefs, gives preference to good judgement and rationality, and provides the African with a high quality instrument to evaluate the relative nature of what may be considered, a priori, as universal;

(ii) providing the young African with a tool which will assist him or her to understand the experimental sciences, and to organise daily activities;

(iii) introducing the young African to the construction of abstract models on the basis of the concrete models of his socio-cultural environment.

It is most important that the teachers understand and, in turn, make their pupils understand, that mathematics is not only what is taught in class on the basis of a compulsory programme and recommended manuals, but that it also embraces in particular what is learnt in daily life in the different spheres of human activity.

Thus objective (i) will be pursued at all levels of education, but in diluted form in terms of the content and presentation of lessons. Objective (ii) will also be present at all levels: from primary to lower, secondary level, at least as substance; at all other levels, as a tool. Objective (iii) will constitute the substance of teaching at the higher education level, as well as at the upper secondary level, particularly for that stratum of the school population called upon to pursue scientific studies in the science faculties and other specialised institutes.

2.2.2. Objectives of the teaching of experimental sciences.

These objectives are numerous and varied and may be broken down as follows:

(i) On the cognitive level:

The teaching of experimental sciences in the African school should enable pupils to:

- acquire, understand and use scientific knowledge (facts, concepts, rules, symbols, laws, methods and processes);

- perceive the need to study the living world and the physical environment by experimental procedures;
- acquire and practice the experimental method;
- see how the principles learned in experimental sciences can be used in other fields: hygiene, physical education, social studies, ethics;
- formulate and verify hypotheses relating to natural phenomena considered as supernatural in certain African societies;
- become aware of the effects, beneficial or not, of the applications of sciences on living conditions.

(ii) On the emotional level

The teaching of experimental sciences in the African school should enable pupils to:

- show an interest and curiosity in scientific problems, particularly by being attentive to events of a scientific nature and taking pleasure in participating in scientific activities;
- display considerable openness of mind and show critical judgement;
- verify the validity of a source of information;
- be careful to be precise, accurate, concise and clear.

(iii) On the psychomotor level

The teaching of sciences in the African school should enable the pupils to:

- use correctly the tools of observation made available to them, particularly measuring apparatus and instruments;
- draw up and present a report on an experiment conducted at school, at home and in the surrounding environment.

2.3. Objectives of the teaching of technology in the African school

The revised Recommendation on technical and vocational education, adopted by the Conference of Unesco at its eighteenth session in November 1974, gives very useful guidance for defining these objectives. We shall largely draw from them.

2.3.1. Objectives of the teaching of technology in the African school

(i) In the cognitive and psychomotor area, initiation and introduction to technology and to the world of work should enable pupils to:

- become acquainted with the technological aspect of modern culture, from both the positive and negative points of view;
- develop their ability for practical reasoning;
- select advisedly a profession or technical and vocational training;
- get to know a wide range of technological fields as well as the specific situations which arise in productive work, in order to reduce the time required to adapt to their future jobs;
- acquire practical skills, for example skills relating to the use, repair and maintenance of tools, and the application of safety measures, whether these skills are intended to be used in the course of studies, training and subsequent employment, or during leisure hours;
- analyse local methods of construction, storage, harvesting and processing of agricultural products,
- understand the operation and use of certain instruments and machines used for tapping natural resources;
- make a technical study or analysis of technical objects, i.e. identify a problem to be solved, select from among these objects the most suitable for solving the said problem, in other words compare their functions to indicate the limits of operational use of each of them.

(ii) In the emotional area, the teaching of technology should enable pupils to:

- acquire the mental attitudes and ways of thinking appropriate to the development of their ability to act, achieve, create and innovate;
- acquire respect for work requiring practical skills;
- opt for technical studies of other streams;
- love and appreciate what has been well designed and skillfully done.

2.3.2. Objectives of the teaching of technology in preparation for a trade or profession.

In the developing countries, and in the African countries in particular, it is known that disparities may exist between teaching of the institutional type, and employment and career prospects, inasmuch as the different trades are, generally speaking, not really structured and "watertight" when first introduced. The recognised shortage of qualified technicians at different levels is also known to prevent the fine specialisation found in developed countries, where professional complementarity may be a greatly used asset within the same trade. Finally, it is generally agreed that in our countries the informal sector and the small and medium-sized enterprise must play a major role in our process of economic and socio-cultural development.

Consequently the teaching of technology in preparation for a trade or profession must provide the young African with proven know-how whilst avoiding excessive specialisation.

Consequently,

(i) in the cognitive and psychomotor areas, the teaching of technology in vocational training should enable pupils to:

- acquire the basic principles for pursuing productive careers, particularly general knowledge and fundamental skills in preparation for a wide range of jobs in a given sector, so that they are not limited in their choice of trade or profession and may easily move from one field of activity to another in the course of their career;
- acquire, in the field of activity considered, satisfactory technical skills and proven know-how;
- acquire skills, knowledge and mental attitudes enabling them to benefit from life-long training and to cope with technological change;
- get fit intellectually and practically for taking up an independent activity.

(ii) In the emotional area, the teaching of technology in vocational training should enable pupils to:

- acquire a sense of values and professional responsibilities which must be placed in a humanistic framework;
- adapt themselves quickly to new ideas and processes;
- be willing to improve their professional status;
- endeavour at all times to do better and innovate.

By making a clean sweep of the previous experience of pupils, or by ignoring it, teaching may sow confusion in their minds because of the possible negative interaction between their pre-scientific representations and the scientific explanation of the phenomena considered.

3.3. Teacher training

An experimental approach to the teaching of sciences and technology will require, more than in the past, qualified teachers in sufficient numbers. The training of qualified, competent teachers capable of above-average performance and method, therefore constitutes the major factor for the effectiveness of this teaching. But one of the prerequisites for this training consists of overcoming the resistance generally shown by the best students in sciences and technology toward choosing a teaching career; failing this, there will always be the problem of low enrolment, in the scientific and technical sections of teacher training colleges. One of the solutions to this problem surely lies in a political choice tending to give preference to, and strongly encourages scientific and technical streams at all levels of training.

3.4. Popularization of science

Although "extracurricular", this prerequisite of teaching effectiveness in sciences and technology is no less important. The aim is precisely to develop a scientific and technological mentality in the African populations as the scientific and technological knowledge acquired by the school-educated groups will be difficult to put into operation if the social environment continues to manifest behavioural patterns which run counter to the demands of a scientific mind.

Moreover, the general public should be made aware of the strategic role of science and technology in improving living conditions and in all processes of development.

Mass communication techniques and various methods may be used to that end, namely:

- the creation of scientific museums;
- the organisation of scientific exhibitions and debates on sciences and technology, particularly to explain natural phenomena;
- scientific and technological assistance to craftsmen and rural populations;
- the awarding of prizes with a view to encouraging scientific discoveries and inventions.

IV. Some Strategies for Promoting the Teaching of Sciences and Technology in Cameroon

Africans in positions of responsibility are fully aware of the strategic role of the teaching of sciences and technology in school. The promotion of numerous innovations in this field clearly illustrates this awareness. The various strategies applied for this purpose are dependent on the resources and specific requirements of the countries concerned.

In Cameroon, promotion of the teaching of sciences and technology is considered a priority. For example, in the framework of primary education reform, mathematics and scientific and technological initiation are given preferential treatment, as are manual activities.

In secondary education, the introduction of technology at the lower level constitutes a significant step which illustrates the option now being taken by the Cameroon authorities. Moreover, specific innovations, not only in terms of content and teaching methods, but also in terms of assessment systems, have been made in the teaching of biology, physics, mathematics and technology.

The Ministry of National Education has also just renovated the general programmes of technical training so as to integrate theory with practice.

In secondary education also, a large number of textbooks on mathematics, biology, technology and the physical sciences have been written by nationals and published locally or abroad through a co-publishing systems.

The most remarkable step taken in Cameroon seems to be illustrated by the considerable rise in enrolment in the scientific and technical streams of educational institutions. As evidence of this Cameroon effort we may mention the very large number of candidates for the preliminary and school-leaving examinations in scientific subjects compared with Arts subjects.

Thus in 1983, 15,355 candidates sat for the preliminary examinations, 11,300 of whom were regular candidates in the science series (C,D and E) and technical series (F,G, BT) combined, as against only 6,607, 5,298 of whom were regular candidates, in arts series (A1, A2, A4 and B). At the school leaving level the same difference was observed, there being 7,783 and 4,356 candidates respectively in the two groups of series.

For several years measures have been taken at Yaounde University to steer holders of a scientific school-leaving certificate towards the Department of Sciences, instead of enrolling in Law and Economic Sciences, as they did in the past. Moreover, enrolment in Sciences increased from 1610 in 1980-1981 to 2,919 in 1983-1984.

In December 1981, the Department of Sciences organised a major seminar on the yield of scientific education at the University of Yaounde, which led to the formulation of appropriate recommendations for improving the teaching of sciences in University institutes.

A growing trend towards professionalisation of science teaching is also being observed at the Department of Sciences in terms of greater specialisation of streams of training, particularly from the third year onwards, in accordance with the recommendations of the last session of the Council for Higher Education and Scientific and Technical Research in October 1982.

In order to promote science and technology, Cameroon has created a number of educational structures:

- the university centre of Dschang, for agricultural sciences and techniques;
- the university centre of Ngaoundere, for agro-industrial sciences and techniques;
- the National Higher Polytechnic (ENSP);
- the National Higher College for Public Works (ENSTP);
- the Technical Teacher College (ENSET);
- two Primary Technical Teacher Colleges (ENIET);
- four Technical Auxiliary Teacher Colleges (ENIAET).

Moreover, at the beginning of the 1983-1984 school year, enrolment began increasing in the science sections of the Teacher College, the intake by competitive examination rising from 30 to 40 in mathematics and physical sciences. In the research institutions, the National Centre for Education (CNE) and the two Institutes for Rural oriented Teaching (IPAR), teams of researchers are studying conditions for improving the teaching of sciences and technology. At the General Teaching Inspectorate (IGP), the number of national teaching inspectors in the scientific disciplines has increased considerably.

Finally, the most recent measure taken by the Head of State, H.E. Paul Biya, aims at creating a Ministry of Higher Education and Scientific Research, whose triple task will be to provide managerial training and pedagogic supervision of Higher Technical Education throughout the country, and to promote scientific and technical research.

As can be seen, the efforts already made in this field are substantial. However, bearing in mind the growing importance which Cameroon attaches to the teaching of sciences and technology, much remains to be done.

Conclusion

Throughout this report we have tried, without claiming to be exhaustive, to define the role of the teaching of sciences and technology in the African school in terms of purposes and objectives to fulfil. For the sake of analysis we had to admit a certain dichotomy between science and technology, a dichotomy which is only apparent, for as it is generally known, technology proceeds from science, and science feeds on the requirements of technology in its attempts to transform and control nature.

On balance it may be asserted that the integrated, efficient teaching of sciences and technology in school is the road the African countries will have to take in the process of their necessary development.

We are all aware of that necessity. But in reality, the major challenge lies less in this awareness than in the will, determination and ability which the African countries will show to fulfil all the conditions for efficient teaching of sciences and technology.

Panel II

THE ROLE OF SCIENTIFIC AND TECHNOLOGICAL EDUCATION IN THE AFRICAN EDUCATION SYSTEM

Presentation by Mr. Tom Bediako
Representative of the Organisation of African Trade Union Unity (OATUU)

Introduction

Since the independence of our countries 20 - 25 years ago, there has been continuous debate on the forms of education appropriate to national development because the essence of development, simply put, is the mobilisation of human resources for human benefit. When development is perceived in this way, all hopes for development are set on education, being one of the most appropriate institutions for turning potential human resources into actual resources. For the workers of Africa the main concern in development is how to satisfy their basic needs of food, clothing, shelter and basic rights to be able to work and earn a decent living in a democratic society.

Despite efforts being made by our governments and ourselves as educationalists, the majority of our people are still struggling for existence in terms of better quality food, enough and appropriate clothing, decent and habitable accommodation. Poverty, disease and want are still with us if not increasing.

All these are based on the assumption that science, and especially technology would be taken up later but the truth is that even in the year 2000 A.D., many of our pupils and students may not go beyond the seven - eight grade of primary education. We shall still have a sizeable proportion of our students not going beyond secondary education before entering the world of work.

The question, therefore, is what practical steps can we take to give the majority of our pupils and students basic science and technology education to prepare them for continuing education and the world of work.

The questions that we should try to answer include the following:

(a) different stages at which science and technology should be introduced in the future school curriculum which will at least expose all children no matter what they are going to do to certain scientific and technological knowledge and skills;

(b) what sort of improvements do we envisage in the content of science and technology;

(c) who and how are they going to be taught.

I wish to propose that we try to identify within the school system the contribution that education could make in preparing our citizens for the 21st century to control their environment for their own good and for the society at large.

I submit that one of the sources of our woes is the fact that we have not given sufficient and continuous attention to science and technology education. It is my belief that education in 2000 A.D. would have to face even more challenges in the field of science and technology education if we are to equip our pupils and students to face the explosion of knowledge and ideas. We should think of measures which will not only make science and technology education more relevant and more purposeful for the world of work, to reduce the unemployed, underemployed and unemployables.

The first problem is how we can redress the imbalance in the provision of facilities, resources and access to education which are the foundations of the scientific and technological development of our societies.

(a) First, the concept of secondary education: In 1978 according to Unesco statistics 85% of second cycle education was mainly for general secondary education, 5% for teacher education and 10% for other education of a vocational and technical nature.

(b) In our primary or elementary schools the general education places emphasis on arts, reading and writing. In some schools science or nature study has one period of 30 minutes a week or at best one hour of 40 - 50 hours a week.

(c) In secondary schools, there is the practice that we separate the sheep from the goats as early as the age of 14 - 16 - science students, art students, as if there is a world called science world and arts world.

At the various stages:

- pre-school and primary levels;
- science and technology at the secondary level;
- science and technology at the higher levels of education;
- science and technology in the continuing education programmes and the non-formal and informal sectors of education.

At the Pan-African Workshop on Teachers Organisations and and in the Harare Declaration special attention was focused on science and technological education and some of the recommendations, emphasising what teachers and their organisations can do to promote science and technology education at all levels of the school system and the educational system in general, are very relevant. Time will not allow me to go through all of them but a few examples may be useful:

(a) promotion and intensification of regional and national policies of science and technology by deeds and not by words;

(b) adoption of an interdisciplinary approach in teaching science;

(c) inter-regional and sub-regional cooperation in the development of science and technology education through improved communication, diffusion and dissemination of science knowledge in simple and effective ways;

(d) persistence of experimental projects and improved evaluation;

(e) continuation and expansion of improvisation;

(f) intensified training of personnel;

(g) re-orientation of the focus of research by African scientists and technologists;

(h) closer link between science and technology teaching in schools and the world of work;

(i) improvement in the status of science and technology teachers.

There should be special incentives to enable education to compete with industry and commerce for the best qualified persons in science. Our examination system needs to be reviewed for it tends to discriminate against technical subjects.

Conclusion

The working class of Africa looks to education and educators for more jobs, the humanisation of work and dignity of labour through the development of positive and relevant science and technology education. It is only when this is done that we as workers can think of our real social and economic emancipation.

Panel II

THE ROLE OF SCIENTIFIC AND TECHNOLOGICAL EDUCATION IN THE AFRICAN SCHOOL

Presentation by John Kisaka, Uganda

We are all aware that we live in a scientific and technological era which has affected and continues to affect our lives. As we know, science is concerned with every aspect of the entire environment we live in, both physical and biological. It seeks to understand the nature of our environment, its operation, the interactions of its components and evolutions.

Since the independence in Uganda, my country has been pre-occupied with the task of expanding our educational system. Considerable efforts have been made to provide education to an increasing number of youngsters in the population. The government's main long-term objectives have been:

(i) to make primary education available to a fast increasing number of school age children until, ultimately, universal primary education is achieved. For example, in 1970 in Uganda we had about 700,000 children attending school as against 3,000,000 attending school at present;

(ii) to provide every individual with basic skills and cultural awareness necessary for a full and productive life within a dynamic society;

(iii) to provide sufficient manpower of the type and quality necessary to meet the skill requirements of the expanding economy.

In 1963, soon after the independence, the Minister of Education appointed an Education Commission under the chairmanship of Professor Castle to examine the content and structure of education and future improvement in view of Uganda's financial position and future manpower needs, in order to provide a complete technological discipline in our secondary schools with technical bias. These schools were to form the nucleus of technological discipline in the country. The role of this kind of education was to provide more understanding of the society in which the pupils live through workshop experiences that enrich their growth and development and encourage them to be creative and imaginative. The system was to develop knowledge of energy and its control, the use of tools, materials and processes through sequential experience in project work and to encourage interdependence in solving practical problems in everyday life. The prime role of this kind of education was to produce pupils who are capable and have the opportunity of original thought, the fire of ambition in their bellies and determination to meet the challenges posed by the world of work.

Schools and society have in general discouraged the best pupils, scientific or non-scientific, from going into industry through the provision of a more stimulating and rewarding environment outside the industry.

Our beginning was hard going but with determination and perseverance, I can say now that the worst that could befall us is over. The swing of public opinion towards the introduction of technological education in our schools has been most reassuring and encouraging. For example, today out of over 300 established secondary schools, technology in its elementary form has been successfully introduced in over 74 of them. It is gratifying however to note that this figure represents an increase of 80% from 1979 - 1983. This is a manifest of the positive policy of the government adopted after the liberation of the country from ten years of dictatorial rule when the wheel of education was almost grounded.

It is clear that improvement in quality education should be a continuous process if we have to keep abreast with the rapid changes taking place in our society. Continuous improvement of any education system crucially depends on a clear conception of the goals that are being aimed at. Such goals are the criteria of selecting relevant curricula.

In Uganda we have formulated clear educational and instructional objectives in all subjects. These objectives are development oriented, where development implies better living standards, increasing employment opportunities and the like. Guided by this cherished and noble goal, our curriculum laid emphasis on the integration of knowledge and school subjects, especially science, mathematics, technical and vocational programmes.

In Uganda our system of education has two major sectors and I think this is true in most parts of Africa: primary and post-primary. The post-primary includes secondary schools, training institutions and colleges of higher learning. I will now attempt to briefly explain how the subjects of science, mathematics, technical and vocational training have been inter-related at the various levels of our education system, with a view to preparing the individual learners for the world of work.

In a nutshell the thesis of this Conference implies that the new challenges in the path of development in our countries have created a new relationship between the school leavers, their education and work. In this relationship, education is squarely between man and his work; and the modern society is such that this relationship is for all men and for all work. This means that although we are addressing ourselves to school education first and foremost, we should not lose sight of the out of school youths and adults who constitute the largest percentage of the productive force in our respective countries.

The disciplines of science, mathematics, technology and vocational training now dominate the world of work, irrespective of whether this work is in the rural or urban communities. Hence in planning education curricula, we need to be conscious of the fact that the learning experience designed will produce people who will play a vital role in the development of our countries through work.

Turning again to the situation in my own country, I would like to state that the demand of scientists is very high. Thereto efforts have been made and are still in force to produce more science teachers every year. We have, however, begun to realise that it is the standing of science in schools which needs urgent improvement. It is clear that good technologists, doctors, industrialists have to have a good background in science and their background is better cultivated at school level.

It is obvious according to the theme of this Conference that what we are really discussing is whether the present training is oriented towards the needs of "our society", since the society we serve many times fails to openly indicate its needs. The Ministries of Education often find themselves in a very difficult situation whenever called upon to draw up the most effective curricula. In Uganda, however, my organisation of teachers has been working hand in hand with the Ministry of Education with regard to curricular development.

Scientific and technological education in our primary institutions

The new approach to education as advocated by the famous Namutamba project presently known as Basic Education Integrated Into Rural Development (BEIRD) lays emphasis on the integration of theory and practice; the integration of school and the community where the world of work is found.

This approach encourages pupils to learn through inquiry application and practice. The primary science curriculum includes such learning as animal husbandry and agriculture. Here facilities like animals are provided. Pupils learn how to feed these animals, how to build animal shelters, storages and also the marketing of animal products. In this way pupils learn the science of animals and at the same time learn the importance of animal husbandry as a worthwhile employment. The same is the case with agriculture.

During the course of learning animal or crop science, pupils learn to construct animal houses, feeding trays, poultry drinkers and other pertinent technical skills. The various learning experiences also introduce pupils to the principles of energy and inter-conversions. Heat, sound, light and electricity are studied. Also machines and their use are studied.

Some follow-up studies so far carried out have shown that some boys and girls who leave the primary schools with Namutamba experiences, have good success at home in poultry-keeping, brick-making and others. It is hoped that such experiences provided by this curriculum will cater for the so-called drop outs by making themselves employed, in other words, employing themselves.

Looking at secondary school level, the changes in the orientation from production of knowledge of science to utilisation of that knowledge and to service indicate a maturing of science that reflects the social revolution in that field of knowledge. The changes in sciences are occurring simultaneously with other national changes.

The science curriculum in our secondary schools lays emphasis on the major aspects of education that is commensurate with development. These other aspects are the experiential, experimental and investigation. The other aspects are adaptive and applicability of scientific knowledge and principals to technology and the world of work. In teaching science the basic scientific methods are stressed with yet another objective of stimulating curiosity, inquiry and self education as well as encouraging resourcefulness and ability in problem solving that is continually called for. Pupils are given the basic scientific requirements that are necessary in the scientific and technological present day world. In doing so, the inter-relationship of mathematics, science and technology is manifested in all subjects of study like chemistry, physics, biology and agriculture. Studies in these subjects require and demand knowledge, skill and ability to handle tools, and data, which are fundamental to the principles of technology.

A look into the future

The curriculum we adopt for the pupils of the year 2000 must provide unity of learning whilst also maintaining social unity amongst the children within their age-groups. We should direct the teaching of the various technological disciplines to imparting the basic knowledge in technology alongside other traditional subjects. The children must be taught how science can be used to practical effect. In this way children who are not inspired by the old pedagogical methods will find technological projects most exciting, at the same time academically brighter ones will learn to apply their theoretical knowledge acquired from the laboratories and classrooms to practical effect.

In the teaching of technology, project work should be designed to expose pupils to man and his environment, human behaviour, processes in the industries, climatic conditions suitable for establishing a factory, world communication and trade, international conflicts and cooperation. Technology should be used to direct the thinking of our pupils to commercial and graphic art and mathematics which is the most important data-language we have developed. It should occupy its rightful place in the teaching of technology at all levels to show pupils the various mathematical methods of constructing a parabola, etc. We should have avoided compartmentalisation by integrating the teaching of technology with science, humanities and mathematics. Our objective in providing unity of learning will have been achieved. Society is not static. It would be self-defeating if our technological education concentrated on the technological development in the country without working forward and anticipating future developments. Technology has assumed new dimensions of late and we must keep pace with it. The needs and technological development in Africa pose more challenges to us now than ever. The threat of starvation, disease and other hazards must be fought more vigorously now than we have done in the past. As the words of psalmist: "Thou hast given him dominion over the work of thy hands; thou hast put all things under his feet".

We may well wonder how much of the kind of man we are permitted to be and how much we have welcomed the tools that can release us for better things. The old order in technology is being challenged at every point and the problem now is to know what to discard from conventional thinking, and yet what to retain from that which has proved valuable in the past.

The introduction of new technology with the electronic computer at its centre is a must, but it should be gradual and systematic and its application requires trained manpower and finance. There are pitfalls as well as promises. There can be misuse as well as use of new technology. The use of new technology in basic education frees the teacher for the real educational task of drawing out the latent possibilities of his pupils. It is this latent possibility in our pupils we would like to exploit in the year 2000.

In conclusion it is my view that the teacher of technology should be one who is able to guide and supervise the correct choice of materials and precise use of tools and he should be capable of evaluating. He should act as a facilitator and adviser, a resource to assist the pupils how to learn by mistakes and success. He is the one who encourages the students to develop resource searching skills and value judgement. The knowledge of vocational guidance in consultation with industry and labour department is one of the pre-requisites of a teacher of technology. He should have the proficiency in overall course coordination and integration of practical work with other course units in the curricula.

In a nutshell, the teacher of technology should be concerned with the optimal and not the unique.

For effective implementation of technological activities in school, there is great need for coordination within the school between departments, between schools and colleges and between school and industry. We regard colleges as key links because of their connections with industry. We should make full use of what industry can offer. In other words our industry should be used as source of information about technological advance.

PANEL II

The role of scientific and technological education in the African school

SYNTHESIS OF THE WORKING GROUPS (A,C,D)

There is a general recognition of the importance of the teaching of science and technology in the African school, and of its role in awakening the scientific mind and developing a spirit of creativity and observation. Such teaching facilitates insertion in active life and represents a means of linking education to economic and national realities (group A). Nevertheless, its introducation encounters numerous obstacles. Science and technology are subjects that are badly taught because of large pupil numbers constituting an obstacle to the operation of instruments and equipment that are often inadequate or even non-existent (group C). Teaching materials are in short supply and, where available, badly managed with no adequate arrangements for maintenance (group A). It is essential to make more active use of the equipment available for the teaching of science and technology (group D).

The existence of timetables leaving not much place for teaching of this kind is an obstacle to development of a scientific mind (groups C and D). Other negative factors are the question of mental attitudes (manual work implies arduous tasks ..., existence of castes ...), the negative attitude of teachers and supervisory personnel, unduly theoretical teaching, teachers who are not well qualified, lack of information on successful experience already recorded (group A).

How can this teaching be adapted to national, regional and local needs and realities?

It is essential to establish a link between scientific and technological education and the needs of the community (groups A, C, D), to identify local needs and draw up curricula in relation with them, and to link this education to productive activities in order to facilitate development of a scientific mind and of appropriate technology (group C). It is also necessary to encourage persons from outside school to collaborate in teaching science and technology (groups A, C, D). Education can be adapted to local realities by encouraging experimental research and diversifying curricula (group A). It is also desirable to train versatile teachers by including a variety of subjects in their training (group C). Technological subjects must be taught by well-trained teachers (group A) who have the necessary scientific and technical qualifications and are assured of appropriate remuneration (group D).

In order to avoid compartmentalisation, it is important to integrate the teaching of science and technology in the other sectors of the curriculum. To that end, it is important to ensure close contacts among teachers of the various subjects, introduce study of the environment, and intensify use of language (group A). It is necessary to train a versatile teacher, encourage linkage between the various subjects taught, and mobilise productive activities in order to develop knowledge of certain concepts of science and technology (group C).

Continuity and transition as between traditional technologies and new technologies will be established first by defining the concepts of these two types of technology, then by integrating traditional techniques at the teaching level (group A). What is needed is to integrate the empirical dimension of traditional techniques in the education process, by demonstrating scientific principles through simple techniques (group C). Involvement and participation of outside persons in the training of pupils should be encouraged (groups A,C,D). It is important to encourage research, exchange and ensure collaboration between the school and the community (group A). Traditional scientific and technological teaching should be integrated in the corresponding new teaching methods (group D).

Financial implications

Since the State and local collectivities can no longer face up to increasingly high financial costs, it would be useful to encourage the introduction of productive work at school as well as on-the-spot manufacture of equipment and development of profitable activities at school (group C). Similarly, local resources can be drawn upon and assistance can be sought from schools and local undertakings for obtaining equipment and materials and training teachers. The status of teachers should be improved, and local training facilities provided for them (group A).

Examples of successful introduction of technology

Mali: introduction to science and technology within the framework of artistic activities and rural studies. Exhibition of pupil assignments.

Cameroon: handicrafts competition for schools (group A).

In many cases, successful activities have been maintenance of school buildings, organisation of school allotment-gardening, poultry-raising. If technology is to be introduced successfully at school, it should have some relevance for the community (group D).

It is useful to continue experimental work in relation with the teaching of science and technology in order to better define subject-matter, set up teams for equipment maintenance, publicise experimental activities in English-speaking countries at the primary level, and encourage experimental research for this type of teaching (group A).

INFORMATION AND REMARKS ON THE PANEL THEME

Panel III

Training teachers with a view to "interaction, education and productive work"

In the light of their national situation, their experience and the recommendation by the 1981 IBE Conference, the three speakers will address themselves to the principal problems involved in the preparation of teachers with a view to "interaction, education and productive work".

In addition, they will discuss the implications of such interaction at the level of higher education, indicating the changes which, in higher education, are conducive to facilitating this interaction and the training of secondary-school teachers with a view to such integration.

1. What are the implications of the option "interaction, education and productive work" in regard to:

(a) recruitment of teacher candidates;
(b) initial training:
  - general
  - pedagogical
(c) in-service training;
  structure of training establishments.

2. How can one reconcile the requirements of a satisfactory level of academic training of teachers with those of interaction, and make specific recommendations and suggestions on this subject?

Panel III

TRAINING TEACHERS FOR INTERACTION; EDUCATION AND PRODUCTIVE WORK

by Mrs. Aimée M. Gnali
Representative of BREDA/Unesco

To the extent that it constitutes a new function, the introduction of productive work in school makes it necessary to redefine the profiles and roles, not only of teachers but of all who intervene at the various levels of the education system and the various phases of the education process: pedagogical staff, technicians, administrators, planners, managers, training personnel, supervisors, etc.

First problem

As regards teacher training, the first problem is that not all the aspects of this new function have been identified to date. Hence the difficulty of preparing teachers adequately.

The difficulty of identifying all the aspects stems from the difficulty of pinpointing the concept itself. What is productive work? Annex IV to the guide used for the training workshop with a view to introduction of productive work at school, held at BREDA in May 1983, devotes four pages of condensed analysis to it, on the basis of Unesco publications. From one country to another, acceptations differ, as do the relevant activities.

Unesco's Medium-Plan for 1984-1989 considers the aim of introducing productive work into the education process as being to arouse in pupils a positive attitude towards all forms of creative human effort.

Second problem

All forms, hence all kinds of activity at all stages of the education process. Hence the second difficulty, that of delineating a single profile. According to the component elements, one may be dealing not with one profile, but with a number of profiles. Nevertheless, even though education situations differ according to the activity concerned - farm, industry, handicrafts, etc., the functions remain very similar and close to one another. It would therefore be possible to envisage a common core of training together with specific parts to cover each particular situation.

The common core is all the more necessary since teachers are not the only persons involved. In order to prepare them for working in common, speaking the same language, being situated in the same context, they must be ready to receive a minimum of training in common. It is not merely a matter of preparing them to take on new tasks, but also to adopt new mentalities and attitudes for communication and cooperation with all the other persons associated in the undertaking: administrators, various development agents, technicians, workers, craftsmen, farmers, etc.

- better understanding of the problems and needs of the local, national and international community;
- more direct and more comprehensive knowledge of the working world;
- greater participation in the achievement of appropriate solutions, in particular in the area outside-school activities.

In addition to what has become the traditional role of animator,which consists of creating learning situations and counselling within the context of those situations, one should, therefore, also develop the role of coordinator and supervisor of activities, in other words:

- ability to choose an operational intervention strategy;
- ability to draw up diversified programmes for productive work.

Third problem

Such a redefinition calls for a new approach on the part of training institutions and brings us to the third problem arising from the interaction between education and productive work - that of the linkage between the various kinds of institutions which, in various capacities, take part in the training process: organic liaison between theoretical training and practical experimental training for the determination of common cores; importance of action-research in training programmes, since teachers are the users of the result obtained.

Fourth problem

Nevertheless, one cannot wait until the reply to these research activities has been found, nor even until the uncertainties surronding the concept of productive work have been dispelled, before beginning to undertake the training of teachers, and more particular of those already on the job. In-service training is a need that is all the more urgent in that the teacher population concerned is the largest in number while the initial training it has received is inappropriate, since it reflects a difference between its objectives and the activities actually implemented. It is therefore essential to include in-service training in a global strategy for renovation of education, linking initial training and in-service training.

Panel III

TRAINING TEACHERS WITH A VIEW TO INTERACTION, EDUCATION AND PRODUCTIVE WORK

Mr. Jean Bassinga, Congo

Introduction: The present statement sets out to present the Congo's aspiration and achievements in the field of teacher training with a view to interaction, education and productive work within the framework of the education system in the People's Republic of the Congo; reference will also be made to a few of the problems arising from the introduction and implementation of this important innovation.

It should be pointed out, from the outset, that the new Congolese education system, known as the People's School (Law 20/80 of 11.1.1980) and whose essential aim is the affirmation of our national identity and the responsibilisation of School in the economic and social development process and in the construction of a socialist society, attaches prime importance to integration of productive work in all school and university activities.

Three essential aims are set for productive work, namely:

- an ideological aim in order to overcome, at school, the myth of pure intellectualism and rehabilitate manual work in order to facilitate at a later stage the harmonious integration of pupils and students in the world of production and their effective participation in the concrete activities of productive life;
- an educational aim to encourage better assimilation by pupils and greater retention of theoretical knowledge through the theory-practice linkage; in addition, pupils will have to be equipped with all the aptitudes conducive to their integration in the world of paid and unpaid work;
- an economic aim of preparing pupils to organise a set of lucrative productive activities in order to generate and mobilise the necessary financial resources for self-financing of the school; these activities are also conducive to pupil involvement in the economic and collective management of the fruit of their productive activities.

I. Concrete arrangements with a view to interaction, education and productive work

The arrangements made with a view to interaction, education and productive work are of a structural, pedagogical and political nature.

1. Arrangements of a structural nature

(a) At the lower primary level of education, one may note:

the creation of pilot schools: a pilot school is a school unit fully reflecting successful reform. The reform would be extended throughout the education system by progressively disseminating the pilot school model to all parts of it. A pilot school is an establishment that must fulfil a certain number of conditions in regard to structures, equipment, quality of teachers and supervisory staff, school numbers, working conditions, curricula and above all integration of productive work in the remainder of the syllabus. There are at present 20 pilot schools in the country as a whole - 2 in each region.

(b) At the upper primary level of education, the colleges of general education are being transformed into colleges of general and polytechnic education.

The fundamental characteristics of the latter is that of dispensing integrated education (theory - technology - practices) based on the scientific disciplines.

Thus:
- mathematics will lead on to civil engineering;
- physics to mechanical and electrical engineering;
- biology to agricultural and forestry engineering.

74% of teaching time will be earmarked for general subjects, and 26% for polytechnical education.

At this level of education, one may also note the transformation of technical colleges or vocational centres whose aim is to train qualified workers. There are to be:

- agricultural vocational centres;
- industrial vocational centres;
- commercial vocational centres;
- crafts vocational centres;
- home-management and hotel-trade vocational centres.

N.B. The duration of studies is to be raised to four years (as against two years at present), thus allowing a strengthening of interaction-education-productive work with more practical work and courses.

(c) Under the reform, there are three types of establishment at the secondary level of education:

specialised grammar schools, in which instruction is pre-professional, based on the strengthening of traditional courses and with the inclusion of new ones (journalism, sports, pedagogy);
technical grammar schools, of a vocational character, for the training of middle-level technicians;
secondary-level vocational training schools, agricultural institutes.

(d) At the upper level of education, the reform has involved transforming certain faculties into institutes or establishing new institutes, including the opening of a pedagogical institute for teacher training.

2. Arrangements of a pedagogical character

(a) Generalisation of productive work throughout the education system, in particular in regard to agricultural activities.

Productive work as a curriculum subject is included in school timetables and marked (coefficient 1 of the secondary-school marking scale, two - four hours per week).

(b) Establishment of courses of a duration of three to nine months in vocational centres, technical grammar-schools and institutes.

(c) Formulation of new profiles for establishments, pupils, teachers and inspectors in accordance with the reform.

(d) Choice of pedagogy by target as a fundamental procedure for formulation of new curricula (fundamental curricula I and II have already been drawn up).

(e) Preparation of a document entitled "productive work in the People's School" determining the nature and organisational conditions of this activity in each education area.

3. Arrangements of a political nature of an incentive character.

As an incentive to reform, a presidential competition has been established within the framework of productive work:

- at the end of each year: four types of prizes are distributed to the best regions, then the best establishments having regard to results, by educational department (banner, diploma of excellence, diploma of honour, and an envelope);
- prizes are awarded on the occasion of a national day and regional emulation days.

In 1981, the sums awarded in the context of this competition totalled 8 million. Results are evaluated on the basis of output achievement or sales proceeds.

II. Teacher training

Teacher training is central to concerns in regard to the introduction of productive work at school, whether as regards initial training or in-service training.

1. Initial training

Teachers for the lower-primary level receive their training in pedagogical middle-schools - teacher training establishments.

Teacher-training candidates are selected on the basis of a competitive organisation that allows an evaluation of their motivation, acquired aptitudes with particular emphasis on activities integrating intellectual work with practical work. Training at this level must be of reasonable duration (three years following the diploma awarded at the end of the basic secondary cycle) as needed acquisition and deepening of basic knowledge and for introduction to theoretical and practical pedagogical activities and in which productive work occupies an important place.

At this level the training establishments comprise all the structures necessary for carrying out productive activities - agricultural land, workshops, etc. On-the-job training periods in school establishments are of particular importance.

Teachers for the upper-primary level receive their training in pedagogical higher institutes.

In regard to initial training, particular importance is attached to guidance, curricula, training of instructors and the duration of training.

(a) Guidance

With the introduction of the polytechnical approach in colleges of general education which become colleges of general and polytechnical education, the question is to know what type of holder of the school-leaving certificate is suitable for training to teach in the latter kind of establishment.

- those with general-education certificate (series A,C,D) present inadequacies in regard to technical education;
    - qualitative inadequacy at the level of general education;
    - quantitative inadequacy in regard to the requirements of national education because of the very low number of candidates successful in the technical baccalaureate examination each year and the needs of other sectors;
- if the same training is available for holders of a general or of a technical school-leaving certificate alike, difficulties will arise because of differences in their basic training;
- for the first enrolment (1983), admission to the institute was on the basis of a competitive examination for all holders of a school-leaving certificate, without any differentiation as to the subjects series.

(b) Curricula

It is no easy task to draw up curriculum for instructors that can prepare them properly for interaction, education and productive work. It calls for competent supporting staff with experience in regard to integrated education.

2. In-service training

Implementation of the Reform implies re-training serving teachers, at all levels. Two procedures are envisaged:

- a fairly short course in a training institute (at least six to nine months);
- organisation of re-training courses outside school attendance periods.

In both cases, teachers must be given the essential knowledge and theoretical and practical aptitudes, both general and professional, to enable them to work in accordance with the new pedagogical requirements of interaction education - productive work based on principles of versatility.

III. Problems of teacher training in relation to interaction, education and productive work

1. Structural problems

- Very high cost of scientific equipment and didactic material laboratories, workshops for masonary, carpentry, electricity, engineering, etc.

2. Human problems

- shortage of professionally qualified national supervisory staff needed for teacher training;
- high cost of recruiting foreign specialists to train teachers;
- high cost of training national supervisory staff, in particular abroad.

3. Psychological problems

- reticence on the part of many existing teachers in regard to reform, in particular because of the major readjustment and reconversion effort that the new school implies.

4. Pedagogical problems

- difficulties linked to the laborious and detailed formulation of new profiles, new curricula;
- difficulties of implementing the new education methodology, in particular as regards introducing the educational dimension of productive activities.

Conclusion

Despite the difficulties mentioned above, which are inherent in any innovative undertaking of such magnitude, education reform in the People's Republic of the Congo is resolutely on the path toward progressive and effective implementation. Within the frame work of this undertaking, prime importance is attached to the preparation of teachers.

PANEL III

Training teachers with a view to "interaction, education and productive work

SYNTHESIS OF WORKING GROUPS (A,C,D)

The new teacher must show versatility based on an harmonious synthesis of knowledge (theoretical knowledge), know-how (technical knowledge), know-how-to-be (balanced behaviour) and ability to accept change (group A).

Teacher recruitment

Teacher recruits coming from general education and from technical education would need training that would afford know-how to the former, and more general knowledge to the latter, together with pedagogical training for both groups. Multi-disciplinary training and the introduction of a module system would be useful so that each person can concentrate on the areas in which he considers he has some weakness (group A). In recruitment, emphasis should be on the motivation and sensitisation of candidates. As regards primary education, recruitment would be at an early age, and the duration of training would be prolonged (BEPC + four years). For other levels, recruitment can be at the level of school-leaving certificate plus two years of training (group C). It is essential that candidates have the qualifications required for the level at which they are going to teach. They must make a concrete demonstration of their ability and readiness to teach (group D).

Initial training

It is recognised unanimously that initial training of teachers must be oriented towards exercise of the profession. Pedagogical training must also include work experience with the community, and specialists coming from the latter will participate in the teaching process. Methods must be oriented towards investigation (group D).

It would be desirable for teacher-training establishments to be located in various regions, with workshops for introducing student teachers to know-how. The workshops should be adequately equipped so that students can familiarize themselves with various crafts, linking theory with practice. In parallel, primary schools should be equipped with workshops staffed with permanent paid technicians (agricultural technicians, carpenters and other craftsmen), having some training in pedagogy. Such workshops would allow schools to be self-financing to an increasing extent, and teaching establishments could develop in their local environment (school, a forum for theoretical and practical apprenticeship, a producing unit, and to some extent a model for the local environment (group A).

In general training, particular emphasis should be laid on the use of national languages, development of general culture, introduction to techniques, practical work to underpin academic knowledge. Training personnel must be adequately prepared. For example, their initial training could be accomplished in seminars.

Pedagogical training should encourage group pedagogy and aim toward a real pedagogical renewal. Training must include research activities. Pedagogy focussed on action research will lead on to development of teaching materials (group C).

In-service training

In-service training is seen as a possibility enabling serving teachers to update and extend their knowledge and qualifications. It must be an on-going and regular process, whether at the level of school or college. For this type of training, activities must be outward-looking (group D).

It would be appropriate to organise periodic training courses during which serving teachers could exchange experience, improve their acquirements, and learn about new methodologies (or curricula). To this end, teachers or qualified persons from outside sources can be asked to participate on an occasional basis, when necessary. In-service training of teachers should be carefully planned, with provision for workshops and producing units (group C).

Special emphasis should be laid on re-training of serving teachers. Teachers should participate in the preparation of school books (group A).

Theory and practice

There is too great a tendency to take account only of academic qualifications without considering the pedagogical aspect. Curricula must be adapted to pedagogical objectives, and open-mindedness must be encouraged by opening up various disciplines. It is important that student teachers learn how to teach in a perspective of practical application. In fact, there is no conflict between theory and practice, just as there is none between education and productive work (group A).

THE PROBLEM OF RELEVANCE IN AFRICAN SCHOOL PROGRAMMES

by Professor Pai Obanya, Nigeria

To do justice to the topic of this discussion on the problem of relevance in African education, it would be necessary to begin with an examination of the concept of relevance. In our view, it is a concept with physical and philosophical dimensions.

On the physical plane, one can think of the immediate and remote dimensions of relevance. Immediacy and remoteness are themselves matters of degree. In other words, certain physical environments can be more immediate, or more remote, than others. One can illustrate the degrees of remoteness and immediacy in the physical sense, with special reference to the "world" of any African child. The child's most immediate environment is the home. Next to this is the local community, which could be an entire hamlet, an extended family compound within a village, a quarter within a small town, or only a section of a street within a very large city. The child is, at the same time, part of larger environments like a specific region of a country, a specific linguistic and cultural group, the entire country, a particular region of Africa (geographic, geo-political, linguistic), the entire continent of Africa, and the entire world.

With today's economic, technological, communication and information order, an environment that is physically distant could be psychologically near to the individual. This dimension of the phenomenon can be illustrated with concrete African examples. Thus, a Nigerian child who has been through secondary school could have more detailed information on the indigenous populations of Australia (the aborigines) or of New Zealand (the Maoris) than he has of the Bamileke of neighbouring Cameroon. A child from Kenya could be very conversant with music records waxed in the United States (including titles of records, wordings and tunes of songs, and names of artists) and be totally ignorant of records waxed in the neighbouring African countries of Uganda, Tanzania, Ethiopia, or Somalia. It is possible for an educationist in Sierra Leone to be knowledgeable on recent educational developments in the United Kingdom and be totally oblivious of developments in nearby Republic of Guinea.

Africa's colonial experience, and the communication gap which it has created, has also contributed to aggravating the psychological aspect of the physical environment of the African. This explains why the writings of Prof. Fafunwa (a Nigerian educationalist) are hardly known in francophone Africa. It also explains why very few anglophone African students of history and education have ever heard (not to talk of reading) of the works of Prof. Ki-Zerbo of Upper Volta. It also explains why there has been more of what we once called "vertical cooperation" (as opposed to "horizontal cooperation") for educational and economic development in Africa [2]. That is, Africans have tended more to borrow new ideas from the northern hemisphere than it has done from fellow African countries. Borrowing from any part of the world is not the problem here. What is deplorable is total ignorance (or ignoring) of "borrowable" ideas from neighbouring African countries who share common problems and characteristics with one's own country.

The philosophical dimension of the concept of relevance refers to the possible answers we give to the questions "relevant to what?", "relevant to who?" and "relevant to what period in the evolution of man and of his environment?" In other words, what is relevant to who, and when?

It is perhaps more realistic to examine these philosophical issues by looking at the question: "relevant to who". African education is no doubt intended for the African. This African is a citizen of the world of today, but primarily a citizen of his own country and of his most immediate environment. At the same time, the African (especially the one now in school, or likely to go into school in a few year's time) is a citizen of tomorrow. He is someone we have to prepare for both the predictable and the unpredictable world of the year 2000.

The question who is no doubt closely related to the question what. That is what we would consider relevant to the person whose profile we have just tried to sketch? Since such a person will be a product of his environment (as conditioned by a combination of historical, geographical, psychological, and socio-economic forces), what is relevant to him is virtually everything that has a system of interplay with his environment, in the past and in the present, and which can prepare him adequately for tomorrow's life-long education.

Closely related to these two questions is the question of when. We have in fact indirectly answered this in our attempt to answer the two earlier questions. Since the environment of today's African is ever changing (and rapidly too), and since the past, the present, and the future of this environment (in all its ramifications) will continue to exert considerable influence on our who and on our what, the answer to the question when should appropriately be "today and tomorrow". The tomorrow side of the answer is perhaps more important, since our emphasis is on the learner's ability to survive in a world of tomorrow, the complexities of which we can already see the signs.

In discussing the problem of relevance in African education, therefore, one would need to take together the two major dimensions of the concept: the physical and the philosophical. The rest of this paper will use this framework to examine today's African school programmes. In doing so, we shall first examine the concept of school

programmes. We shall then examine more closely each component of today's African school programme, indicating areas needing special attention. As much as possible, we shall pay attention to African efforts, since the 1960s, to work towards relevance in their educational programmes. Finally, we shall offer modest suggestions on how to intensify our relevance - related efforts in African education.

A CONCEPTION OF SCHOOL PROGRAMMES

One general misconception of the term "school programme" is that which sees it as a packaged content, to be drilled down the heads of learners. The learner is expected to master this content (which usually means that he has to memorise it). It is usually his ability to remember what he has mastered that is tested in conventional examinations.

This misconception of what a school programme is all about has done a great deal of damage to education, particularly in Africa. First, teachers and schools have tended to teach the same content year in year out, wrongly assuming that they are dealing with the same group of learners, living in the same situation, all the time. Second, teaching has, wrongly too, taken the form of drilling (i.e. helping the child memorise as much of the content as possible). Third, learning has become a boring activity for the African child. He has had to struggle hard to memorise and to attempt (often unsuccessfully) to recall what he has worked hard to memorise. Fourth, school learning has, consequently, not become an adequate foundation for life-long education, since it has very often not prepared the African child for adjustment to future life. Fifth, the school, the home, and the wider society, have often not worked together. Each sector has not seemed to understand fully the role and the methods of operation of the other.

We would like to advocate the spread in Africa of the more all-embracing conception of the term "school programme". This is the one that sees the concept as a process of engineering and implementing appropriate learning experiences for the all-round development of the learner.

This process is ideally an un-ending one, even though it could have distinct phases. It is an activity that goes on in the form of a chain, as illustrated in figure one.

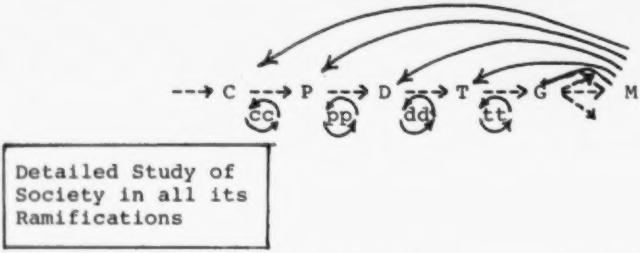

Fig. I: The Chain Nature of School Programme Engineering

What figure one shows is that working out and implementing a school programme begins and ends with the society for which the educational programme is intended. Based on a detailed analysis of societal features and needs, one should proceed through the following activities:

(a) C (Conception) of new ideas on the school programme; considered appropriate to the society. Conception should itself be thoroughly evaluated, with every aspect of it subjected to thorough scrutiny by as many people as possible. The period during which the idea circulates in the minds of people is represented by the circle cc in the diagram.

(b) From the revised conceptual framework of the school programme a Plan (P) should emerge. Again, the plan should go through the minds of people (pp) before it becomes the basis for the development (D) of appropriate materials and strategies for implementing the envisaged school programme.

(c) The processes of developing appropriate materials and strategies is painstaking (dd) and that is why, in figure I, it has a wider circle than the two preceding phases.

(d) The materials and strategies developed have to be tried (T), possibly re-tried several times in a number of places (tt), before they are generalised (G) as a national or regional programme.

(e) Generalisation is not the end of the chain. The programme should be monitored (M) in a number of directions.

(f) As the arrows on the top of the diagram show, the result of the work done at one phase can influence any of the preceding phases. Thus, the experience acquired during Planning (P) can influence the conception of the programme (P), or even lead to more insightful clarification of the society, its goals, and aspirations.

The school programmes, seen as a dynamic process, is therefore a concept that is closely linked with the concept of relevance. This is mainly because the process should, ideally, be closely interwoven with the society it is intended to serve. Such a society will have a past, a present, and a future. Such a society will also have its sub-societies, made up of a variety of environments, ranging from the most immediate to the most remote, and dealing with people.

We are now in a position to combine two theoretical positions (the physical and the philosophical dimensions of the environment, in addition to the more pedagogic - or curricular- considerations) to discuss Africa's educational reform efforts since the 1960s. Our discussion will be as critical as possible, but, our major emphasis will be on workable suggestions. The discussion will begin with the modern African's conception of education. It will then go on to examine the way the content of school programmes and methods/materials of delivery have been influenced by this conception. We shall, finally, offer a few suggestions for re-thinking and re-making educational programmes for the meaningful development of today's and tomorrow's Africa.

MODERN AFRICAN CONCEPTIONS OF EDUCATION

By "modern" Africa we mean the face of Africa (especially south of the Sahara) since independence. Its conception of Education can be summed up in one single expression: "a matter for concern". That Education is a matter for concern can be seen both at the continental and the in-country levels. The concern is also shown at the sub-regional level. Since the famous Addis-Ababa conference of African member states of Unesco, regular regional and sub-regional conferences have been held on African Education. The latest in this series of conference was that held in Harare (Zimbabwe) in 1982.

The earliest forms of concern for education in Africa highlighted mainly its quantitative aspects. Thus, the Addis-Ababa conference focussed mainly on the need to achieve universal primary education by the year 1980. It also suggested transition rates from one level of education to another.

This trend was also seen in the early educational development plans of most African countries in the years immediately following the attainment of political independence. Thus, the Ashby Commission Report (which was the educational Bible of Nigeria in the 1960s) deals mainly with ways in which the educational system of that country could satisfy manpower needs up to the 1980s.

The years immediately following independence were also marked by a spate of cosmetic educational reforms. In the francophone countries, in particular, these reforms were limited to a modification of content. In a number of cases such modifications (like reduction from two to one form of the baccalaureate and the creation of new cycles in higher education) were made simply to coincide with changes in the old colonial master's home country.

Even where more radical reforms (like a total change of the concept of higher education started by the University of Nigeria, Nsukka in 1960) were muted, they soon got withered away by the reaction of a populace whose mentality was largely colonial. Thus, after a few years of a futile battle defending their new ideas, the authors of such ideas had to conform with tradition, to gain general acceptance.

The 1970s and the 1980s have witnessed a greater search for more appropriate educational systems. Gingered into action by Nyerere's Education for Self Reliance, most African countries now have national education documents designed to meet societal goals. In many cases (like in Zambia, Botswana, Lesotho and Nigeria) special committees have had to work on the elaboration of these policy documents. In the case of Zambia, the draft of the policy document was in fact subjected to public debate.

One problem I have had with such educational reform documents is that they have all appeared to confuse schooling with education. They are all called educational policy documents, but they deal more with schooling. The more socialist-oriented countries are a little bit of an exception here. The "Ecole du Peuple" of the Congo, for example, envisages a close link between all agencies of change functioning as agencies of education. The same can be said of current attempts in such places as Guinea, Benin and Ethiopia.

At the continental level, in more recent years, the more qualitative aspect of education is now beginning to receive due emphasis. Both the Lagos and the Harare conferences on education (1976 and 1982) emphasize such items as the use of African languages for education, the teaching of science and technology, the quality of teachers, women's education, and out-of-school education.

This shift in emphasis has been prompted by lessons learnt by all African countries in the decade 1961 - 1970. It was found that education (though schooling) is expensive. It was also found that the infrastructure for meaningful educational planning was (and is still)lacking. In addition, the concept of development as 'modernisation' gave way during the period to that which sees development as as general improvement in conditions of living, and, education (through schooling) has not, in itself, led to development in any meaningful sense.

In short, today's African policy-maker still tends to confuse education with schooling. If most educational reform documents have reformed very little during the past two decades, it is largely because of this simple misconception of education. The time has therefore come to make the very concept of EDUCATION more relevant to Africa.

This can be done by delving into what education itself should be. A view which we have often preached is that it should deal with the development of the individual's three h's - the head, the heart, and the hands[3]. There are other activities, agencies, structures, and institutions in every society which can help with this type of development. They should all be utilised, jointly, for that purpose.

The schools do offer some education. So also do the farms (even those operated by peasant farmers). The same can be said of roadside stalls and workshops. If all these are harnessed for education, it should be possible for every African country to attain universal (and more relevant) education, even if it is not yet in position to finance universal schooling.

THE CONTENT OF AFRICAN EDUCATION

The content of education (or the syllabus area of the total curriculum is that which most people easily recognise as constituting a school programme. In most cases, it is content that is examined at the end of each cycle of education. It is also the degree of mastery of content that is generally used as a criterion for measuring the degree of the success of someone who has passed through the educational system. As was pointed out earlier, most of the educational reform efforts in Africa has been limited to the reform of content.

Perhaps the reform of content would have been a worthwhile activity, if the new content was relevant. But to what extent has the content of education in Africa been relevant? We shall attempt to answer this question with a close look at the language of instruction and the major subjects taught in schools.

Apart from our misconception of education, our greatest educational problem in Africa is the language of instruction. Since the language of the home, and that of the immediate environment of the home, and even of an entire African country, is not usually the language of the school, language has created a barrier between the school and both the home and the society which it is supposed to serve. Irrelevance creeps in here in that the language of the school is not usually relevant to communication outside the school.

The effect of the language problem on the full development of (or education of) the African child is nefarious. From a very early age he is made to explore his immediate environment in a foreign language (often mistakenly called a "second" or a "national" language). Most of the time, he is considered an academic failure (and often forced to drop out of school) when his problem has been created by a society which seeks to educate him in a strange tongue. Even when he has succeeded in plodding through the drudgery of school education in a European language, he often cannot express his thoughts clearly. In many a case, the development of his intellectual capacities does not reach its optimum level, since he is made to think in a language over which he has only an imperfect level of mastery.

Classroom activities have, for the same reason, been irrelevant to the promotion of teaching and learning. Our own research has shown that teachers who are supposed to teach entirely in English in the upper classes of the primary school in Ibadan (Nigeria) usually introduced their lessons in English, carried out explanations in the mother tongue (Yoruba), allow pupils to intervene in Yoruba, and then summarise the content of the lesson in English[4]. More interesting still are the findings of one of our old students. The teachers in her study merely lectured when they taught in English, but, when teaching in Yoruba, their classes were lively with children discussing and even challenging the teacher's points of views. In the classes taught in English, learner contribution was merely monosyllables in the form of yes and no, and teacher was more authoritarian than he was while teaching in Yoruba[5].

Perhaps, the greatest contribution of Christian missionaries (especially in anglophone West Africa) to development in Africa was the development of the written forms of African languages and the use of these languages for Christian worship, as well as for elementary education. Today, the countries with this heritage have not done much to improve on what the Christian missionaries did. There have been reforms in orthography in Nigeria and Ghana. There have also been reforms in the content of what is taught in indigenous languages, and in how these languages are examined. In Nigeria, there have been experimental studies, accompanied by curriculum development work, on the use of Yoruba for instruction throughout the primary cycle of education, but there has been no political will to generalise the practice.

African languages have continued to thrive outside the formal school system. Countries like Mali, Guinea, Ethiopia and Upper Volta have used them successfully in functional literacy programmes. African languages are used for political rallies everywhere (like in the famous "harambee" meetings in Kenya). The musicians of Zaire, the Congo, Nigeria, Ghana, Guinea, Senegal and many other countries have built up the vocabularies of these languages through their beautiful coinages. Translators on radio and television have performed wonderful linguistic feats. So also the traditional performers of music and drama.

What is sad is that, even in those countries that claim to start primary education in the indigeneous languages, and who then teach them as mere disciplines later in school, African languages as taught in schools have not caught up with developments outside the school. Education in Africa is therefore in a language prison. One important step in making it more relevant to our needs will be to release it from this prison.

In examining the subjects taught in African schools, and in seeing the extent to which they are relevant to the past, the present, and the future of Africa, we shall divide such subjects into three groups - disciplines of the head, of the heart, and of the hands.

The Disciplines of the Head

The disciplines of the head refer to those which emphasize mainly the development of the intellect. To this class belong all the traditional school disciplines (languages, the social sciences, mathematics and the natural sciences).

We have already seen the threat to irrelevance of language study in the African school system. At the higher levels of education, the situation of the languages is a little amorphous. African languages (or what some francophones call "African linguistics") are studied in some depth in Universities on the continent. More in depth study of specific languages are carried out on Kiswahili (in Kenya and Tanzania) as well as of Yoruba, Igbo, and Hausa (in Nigeria) and the Akan and Ashanti languages in Ghana). In Nigerian universities, in particular, cultural studies are pursued with some vigour.

With the European languages, the universities of Africa have been too traditional to be relevant to today's and tomorrow's Africa. First, there is an over-emphasis on literary studies. Second, literary studies does not give sufficient attention to creative work in English and French by Africans. Third, the brand of African literature in English and French taught dwells mainly on a few "well known" authors of the culture-shock and negritude school. Scores of more contemporary writers are not given due prominence. Fourth, expositions of African belief and thought (used to illustrate African literature in English and French in our universities) usually represents the African mind as X-rayed by foreign binoculars.

The social sciences seem to have made more progress towards becoming relevant to the African in the anglophone countries than it has done in the francophone world. For the first nine years of formal education, in the English-speaking countries, social studies is an integrated subject, and its content is really African. The francophone countries have not escaped completely from the shackles of "histoire - géo", inherited from colonialism, though the content of school programmes in this area has been largely africanised.

It is in the higher institutions that programmes in the social sciences (particularly economics, political science, sociology, and psychology) have been stifled to a large extent. The greatest danger here is the misinterpretation of key concepts and the uncritical acceptance of western models of thought. For example, our students in higher institutions (except in a few socialist-oriented countries) are exposed mainly to western models of economic planning. Social organisations in traditional societies are treated as if they were too rudimentary to have any bearing on today's and tomorrow's Africa. The notion of democracy is seen as corresponding strictly with the parliamentary systems of the western world. The theories of socio-economic status developed in other societies is accepted uncritically. In fact the catalogue of irrelevance in the study of social sciences is endless. A Nigerian colleague has in fact seen the social sciences (as thought in most African universities) as a form of imperialism [6].

With history, the situation is a little better. The pioneering work on African history by Dike (in Nigeria), Ki-Zerbo (in Upper Volta), Cornevin (in France), and Ogot (in Eastern Africa) has been carried on almost everywhere in Africa. African history has therefore gradually taken its rightful place in the school programme over the past two decades. Not only have new historical facts and evidence been unearthed to enrich the content of history programmes, new ways of interpreting history have also evolved. The origins and course of the slave trade are no longer interpreted the way they were done in the 1950s. Neither do we hear these days of any outsider "discovering" the Niger, the Congo, or the Zambezi. Instead, our children now learn of the first European to trace the course of these rivers.

Geography within each African country has achieved some measure of relevance. The typical African child now goes through his geography course in the way illustrated in figure 1, going from his locality, through his country, to Africa, and to the entire world. But, there are still some unfortunate colonial stereotypes in the content of what is taught. Thus, what is taught on population and industrialisation has not kept pace with recent developments in various countries. Perhaps, the greatest disservice done to our children in geography classes relates to what they learn about other countries of Africa. To most Africans, Nigeria is a federation of three regions inhabited solely by Hausas, Igbos and Yorubas. The actual composition of the population and the political changes that have taken place in that country since 1967 are hardly taught. To many other African children the only knowledge they have of the Congo basin concerns the pygmies. About East Africa all they know is about the Masai, while all they know about Southern Africa concerns the Bushmen and the Hottentots.

African children are made, in geography classes, to see their continent as simply tropical. Thus, they grow up not knowing that snow does fall in Lesotho, and that the concepts of winter and summer are not strange in northern and southern Africa. The result of the irrelevance of our geography programmes has meant a slowing down of the process of African unity. An African child still sees himself as superior to other Africans, instead of seeing them as people with the same past, the same present, and the same future as himself. He finds African names jaw-breaking but struggles hard to pronounce British and French names properly. Our geography classes have also instilled a feeling of inferiority in the African child. His continent is one which imports everything (now called essential commodities, including food items like maize and rice) from Europe and America. His continent is the only one in which the weather is perpetually inclement, and so on.

Turning to the natural sciences, again there seems to have been tremendous progress at the lower levels of education in the English-speaking countries. This has been due mainly to the efforts of the Science Education Programme for Africa (SEPA) which has preached the doctrines that science is discovering, that science has to start at a very early age, and the science teaching should rely on the resources of the immediate environment since 1960. The philosophy of SEPA has been imbibed by several countries who have set up special agencies for the promotion of science education. It is unfortunate that, because of the information and communication order in Africa, SEPA-ism has not spread to the francophone half of the continent.

The teaching of the natural sciences has however not really taken off in the higher institutions of Africa. First, the type of dynamism shown by SEPA has not been noticed in the universities. Second, equipment for teaching science at this level is totally lacking. Third, very few university scientists have shown very deep interest in promoting the teaching of the sciences, as opposed to pure research in individual science disciplines. Fourth, very few African scientists have taken pains to write books for use in teaching science at this level of education.

Science teaching at the tertiary level has therefore not been as relevant to the needs of Africa as it should be. It has not focussed sufficiently on our local environments. Neither has it succeeded in training our young ones for creativity, nor in instilling scientific behaviour in them.

Mathematics, a tool subject for scientific and other forms of thought and action, has been in a sorry state in Africa. Early forms of formal education in Africa did develop numeracy at the primary level and logical thinking in the few children who managed to pass through the secondary school. Through indiscriminate borrowing of curricular ideas from outside, we have put the development of numeracy and logical thinking in our children (through the medium of Mathematics) in grave danger. We borrowed "Modern" Mathematics at a time it was being severely questioned in the western world, thus confirming an old saying in Nigeria that a mistake in London easily becomes a new style in Lagos. Today, the African school programme is battling to restore mathematics to its rightful place. This we can do if we relate the subject to our traditional modes of thought (because the major basic operations of Mathematics are not alien to traditional Africa). In addition, we would need to relate the subject to practical problems, by emphasizing its applications to such activities as buying and selling, construction, agriculture, health and even art forms.

The Disciplines of the Heart

These are those school subjects which helps to develop feelings and ethical values in the individual. They go by different names in different countries, but they fall into the following major categories:

- Creative Arts; (Fine Arts and their applications in pottery, ceramics, etc.);
- Performing Arts (Music and Drama);
- Physical Education and Sports; and
- Moral and Religious Education.

These subjects have featured in African educational programmes since colonial times. They appear to have been given a new impetus since independence, but the prominence has been mainly on paper. Our sense of appreciation of art and music seem to have been deadened by colonialism which laid undue emphasis on alien aesthetic values. Today, in spite of all our hue and cry about cultural revival, the educated African has not become a practitioner of African music. As we have had cause to point out elsewhere, today's educated African can only take photographs of traditional performers and paste money on their foreheads as a token of appreciation of art forms they do not care to understand.

What goes for music in African educational programmes is simply singing. In most cases the songs learnt are either foreign nursery rhymes (in foreign languages) and the more popular (but poorer in aesthetic value) of present day western forms of music.

Physical and health education now emphasise the development and proper functioning of various organs of the body. This is a welcome development, but what do we teach in the form of sports and recreational activities. Football is very popular. So also are tennis and basketball. Field events, like running and jumping, are also popular. There is no doubt that these are now universal activities to which the African also deserves to be exposed. Our only problem with them is that they over emphasise competition. The more recreative sports of traditional Africa (African forms of wrestling, dancing, and games) will need to become part of our school programme in physical and health education. This will ensure that people practise recreation long after they have left school.

In the English-speaking countries of Africa, religious instruction features in two forms (Islamic and Christian religious studies). Civics is taught in a few countries. Most of the French-speaking countries deal with religious instruction in a less formalised way. Very little attention is paid to African traditional religion, except in higher education. The efforts of Arinze and Idowu (in Nigeria), Busia (in Ghana) and Mbiti (in Eastern Africa) have produced useful teaching materials for the study of African traditional religion in higher education, but there has been very little filtration into the lower levels of education - where the foundation of religious thought and moral development ought to be laid.

The francophone higher institutions are yet to develop African Religious Thought as a course in its own. It does go into philosophy, sociology, and literature programmes. This however is a subsidiary role from which the discipline has to extricate itself, to make itself more relevant to the development of the African.

In short, African school programmes are yet too irrelevant to lead to the full development of the heart of today's and tomorrow's African. Forms of citizenship education (like communal service now reintroduced by countries like Ethiopia, Guinea, and Tanzania) will be needed to make for a greater degree of relevance. In addition, the creative, the performing, and the recreative arts will need to be taught by their real practitioners and not by persons who can only talk about them (usually persons who have learnt to "appreciate" these arts from the western aesthetic point of view).

The Disciplines of the Hands

These concern the subjects which deal with the application of the pure sciences to the solution of human problems. They cover the various vocational and technical subjects, by whatever names they are called in various countries. These subjects now feature prominently in educational reform documents in Africa. In spite of the noise we now make about the importance of these disciplines we have, as Africans, rendered them irrelevant in our school programmes.

The irrelevance of today's paper programmes on the disciplines of the hands can be seen in the following phenomena. First, disciplines of the hand (and work done essentially with the hands) is rated low in Africa, both intrinsically and in terms of financial reward. Second, most African countries have adopted a dangerous approach to streaming in school, imported from western countries. By this method, the most gifted children (usually referred to as "academically oriented") are channelled to "academic" programmes (which emphasise the disciplines of the head) while the less gifted - or "technically oriented" - are channelled to more practical disciplines (or the disciplines of the hand). Third, the very concept of technology, as perceived by Africans, is both faulty and irrelevant. Technology is seen only in terms of Western technology. This is why we think of "transfer", "borrowing" or even "stealing" of technology. Africans would need to re-consider the notion of technology and see it as man's attempt to tame his environment. Our children should then learn how their ancestors tamed their environments and later "borrow" ideas from other places to enrich what their ancestors did. Fourth, because of the faulty conception of technology, we have not been sufficiently innovative in its teaching, and our concept of a workshop has remained irrelevant to our economic and social realities. Africa will need to teach agriculture right on the farms of its citizens (not in experimental but unproductive farms), woodwork in the places of work of traditional woodworkers and carpenters, vehicle repairs in garages belonging to our people, etc., if we really mean to develop our technology instead of simply borrowing.

Again, we can see that what goes for subjects of the hands is completely irrelevant physically and psychologically. This is probably why school technological education has not given our youngsters any usable skills. Neither has it enabled them to acquire desirable attitudes towards those aspects of human endeavours involving the use of the hands.

Perhaps, the worst aspect of irrelevance in the content of our school programmes is that of lack of comprehensiveness and balance. A comprehensive school programme is the opposite of a narrow one. It seeks to develop all the three h's of the individual. To be balanced, a school programme has to be a judicious mix of the three groups of disciplines we have been discussing. Every child, irrespective of his orientation, should be exposed to the fundamentals of the other areas of education. By so doing we shall be working towards making each person's education relevant to his future life - a type of life which is fully integrated like a single academic discipline.

METHODS AND MATERIALS OF DELIVERY IN AFRICAN SCHOOL PROGRAMMES

We have, in the course of the preceding discussion, made implicit references to prevailing methods and materials for teaching and learning in African countries. In this section, we shall bring them more into focus, by discussing them more explicitly.

Methods of Teaching and Learning

Methods refer to strategies employed by every school teacher to:

- analyse carefully the content of what is to be taught and the conditions under which it is to be taught;
- study the learner carefully, to be fully aware of his potentials, abilities, and problems;
- break down what is to be taught in a sequence which will facilitate learning;
- decide on the type of activities to be engaged in (during and after the lesson) to enable the learner to interact with the new material to be taught, and to learn meaningfully from it; and
- constantly monitor (as the lesson progresses) the extent to which the learner is (a) acquiring new ideas and skills, and (b) modifying his old values and attitudes.

These ideas were not new to traditional Africa, as we can see in the following illustrations. As a young boy, I used to farm along with my old uncle. In the rainy season, the day's work began with weeding. The old man often demonstrated what he expected us to do with particular species of troublesome weed, when to use the cutlass and when to use the hoe, when and how to stand and stretch one's back, and how to protect all sorts of useful and edible plants (vegetables growing wild, medicinal plants, plants which protected food crops or improved the nutrient value of the soil). As we worked on, the old man did other jobs, like taking care of yam stakes or tendrils, or roasting yam or maize for our meals on the farm. At the same time he was constantly observing us and would interrupt his own work to praise, to demonstrate as often as was necessary, to answer questions and offer explanations, and so on. As farm work went on, we listened to stories of old times, we asked questions on such phenomena as rainfall, drought, the farming calendar, etc. Whenever the old man was not around the eldest of us played the role of father/teacher and instructed us by example, demonstration, experimentation, discussion, admonition, and so on, depending on prevailing circumstances.

In those days grandma used to tell us stories in the evenings. The choice of a story to tell often depended on something that was happening around us. Her task often began by her telling us to be attentive. The story was often interrupted by her questions (designed to ensure comprehension) and our questions (designed to seek clarifications). I cannot recall a single occasion when a question was answered with expressions like "shut up" or "keep quiet". Instead, our questions led to further explanations by the old woman.

Grandma's stories were also usually interspersed with songs which we all joined in, often clapping our hands and dancing. It was never a passive, or boring activity. Yet, our intellect was always a target for the story teller. Her questions were aimed at making us think. The famous question "what does this story teach us?" always led to lively discussions.

Stories were also often told by the children, even by the youngest of us all. This activity trained us in speaking, in presenting our ideas coherently, and in the ways of life and of thought of our people. We also learnt to remember, to pay attention, to tolerate other people's criticisms of our stories, and so on.

These lengthy illustrations are meant to prove that African traditional pedagogy was quite relevant to the psychological dispositions of the learner. What is more, it is not different from what the psychological research of Gagne, Piaget, and others have proved elsewhere. In other words, present-day pedagogical prescriptions are not entirely new to us.

However, what we teach in our teacher training institutions is irrelevant in two respects. First, we present pedagogical ideas as totally new to Africa. We make very little attempts to relate them to our traditional methods of teaching. For this reason, our teachers often see the so-called "modern" ideas as impracticable in the African context.

Second, African teacher trainers have a way of presenting new pedagogical ideas as expensive. Educational technology courses have tended to over-emphasise the products of technology while they relegate the methods of technology to the background. What is worse, teaching equipment bought from, or donated by others, have often broken down too soon after their installation. The African educational technologists thus have the task of making themselves and their discipline more relevant to our situation by:

- laying greater stress on the methods of technology (which brings the technology of teaching nearer to African traditional pedagogy);
- laying greater emphasis on low-cost, but effective, products of technology; and
- showing creativity in their own teaching, to encourage creativity in their own students.

We have seen earlier that the use of European languages for instruction also contributes to making our methods of teaching relevant. Theoretically, the channel of communication in a classroom should be multiple, but multi-way communication is often impossible in a group that has not fully mastered the language it is supposed to be using. The same can be said of the teacher's ability to illustrate and to demonstrate. Often the failure of teaching leads to the failure of learning. When therefore our classes are teacher-dominated and learners cannot use the language of instruction confidently, the end result is at best, memorisation. The higher mental processes are not developed and the product of the school system becomes irrelevant, as he is of little use to himself or to his society.

Materials for Teaching and Learning

We have gone a long way from the days when books in use in anglophone Africa showed the London Bridge and the Big Ben and those used in the francophone countries praised "nos ancetres les Gaulois". We have also witnessed a greater degree of government interests in curriculum material production.

From our limited experience it appears that, generally speaking, the English-speaking countries have made relatively more concerted moves towards making curriculum materials more relevant to the needs of their children and their societies. This has been achieved through the establishment of national curriculum centres in which curriculum materials have been developed, following certain specifications. In many cases the curriculum materials produced have had to go through various stages of trial before their use is generalised in schools.

Another important feature of educational material development in the countries concerned is the regional cooperation which they have forged among themselves since 1976. Under the auspices of the African Curriculum Organisation (which also includes the bilingual countries of Cameroon and Mauritius and the People's Republic of the Congo) these countries have offered intensive training in various aspects of curriculum development to Africans who are the best persons to produce appropriate teaching-learning materials for use in their various countries.

Work in the same direction is going on in many of the French-speaking countries, but the two groups of African countries will need to work closer together, as each has a lot to learn from the other.

In spite of the progress so far made, teaching-learning materials currently in use in African countries cannot be said to be relevant. The situation is due to the following factors:

i. A large number of countries began (perhaps rightly) with adaptation of materials (changing titles and proper names), but have not gone beyond this level.

ii. Most countries are still faced with the constraints of external examinations, which have remained largely traditional.

iii. Material production has been limited to the production of textbooks. Other forms of teaching - learning material have remained at a relatively rudimentary stage.

iv. Specialists in higher educational institutions have not given the necessary leadership in this area by exploring new ways of making relevant educational materials available at reasonable cost to schools.

The state of teaching-learning materials is even poorer (and less relevant) in higher educational institutions. In the English-speaking countries most of the textbooks comes from Britain and America. They present a dilemma both to the teacher and the student. The teacher relies on the foreign textbook to illustrate concepts. As a result the students perceive the concepts as unrealistic and so theories are hardly put into practice.

Where books have been specifically written for Africa, the authors have often been outsiders who have lived and worked in Africa. While one cannot deny the expertise of such persons, one feels that we would need to train more Africans to write books for use at the tertiary level. There are currently a couple of negative influences of most books written specially for Africa. First, such books tend to see Africa as a single, largely homogenous unit, and so do not take sufficient cognisance of developments in specific countries. This problem has been created by commercial publishing houses, whose major interest is the prospect of marketing their books. Second, the "museum mentally" still lingers in many of such books. By this we mean that it is mainly the ancient (meaning not useful for modern times) that is emphasised in such books. Many of such books also over-emphasise African failures - failures of economic plans, economic and educational system.

With the present-day surge in textbook and ideas production in the United States, the French-speaking countries of Africa have been put at an additional disadvantage. This is mainly because the content of tertiary textbooks have had to come to these countries through a tortuous route. An American textbook has first to be translated into French, adapted in France before it is transferred to Africa. This could lead to double degree irrelevance. First, the content is intended for another part of the world. Second, since it takes a long time to get to us in Africa, the content could become outdated by the time we are just introducing it in Africa.

This problem is further complicated in Africa, where academics have been very unresourceful in their teaching. Tertiary level teaching is still seen simply as lecturing. Our research efforts have been mainly geared towards publication in "learned" journals and not towards improving our teaching. For these reasons, most university products have become a problem to African nations. When we talk of graduate unemployment these days, the origin could be traced to various dimensions of the irrelevance of university programmes. In the economic sense, the programmes are not mounted specifically in areas in which the economy would easily absorb graduates. Psychologically, there is some form of elitism attached to higher education. In a continent that is in dire need of development, what we need is an elite class that should be made up of leaders of thought and action, like the age-grade leaders in some traditional societies. Pedagogically, the university student is poorly taught. He therefore has faulty perceptions of himself, his environment, and the role he can play in it. As a result he has not been sufficiently creative to make himself a successful employee or a creator of jobs. This vicious circle can be broken if we (a) change our conception of the university and of its purpose, (b) encourage university teachers to teach more creatively and direct their research towards solving societal problems, (c) involve them and their students more intensively in national socio-economic endeavours, and (d) educate the head, the hands, and the hearts of the university student.

CONCLUSIONS

This paper has examined the question of relevance from the physical and philosophical points of view. It has also looked at a school programme as a dynamic process that begins and ends with the society. These two frameworks have been used to examine the programmes of African schools (at all levels) to see the extent to which they have been relevant to African realities of the past, of today, and of tomorrow. Our conclusion is that our school programmes have not been as relevant as they should be, even though tremendous efforts have been made in this direction during the past twenty years. We have been led to this conclusion by a consideration of conception of education, the content methods, and materials of our educational programmes.

To answer the question: "what steps should be taken to render African educational programmes relevant in the year 2000?" We would offer the following humble suggestions.

i. We have to start with a more relevant and new conception of education. Schooling should continue, but its quality has to be improved to ensure that it really becomes an agent of education. At the same time, other change agents in society should be more fully developed and utilised as agents of education in their various domains of specialisation. Each African society also needs to work for better articulation between all forms of education - the formal, the non-formal, the informal and this articulation should now go from paper to practice.

ii. The use of African languages for teaching and learning in schools should be intensified. More and more African countries should become more courageous and adventurous in this respect. The time has come to move from limited experimentations and field trials to actually learning by doing.

iii. African languages taught as distinct disciplines in schools will have to be enriched in several directions. The content of such programmes will need to keep pace with the development in the languages concerned outside the school system. The textbook should cease to be the sole instructional material and cultural studies should play a more dominant role in indigenous language programmes.

iv. The various programmes in "African linguistics" in African universities should really be transformed into in-depth programmes of study in specific African languages, literature, and culture. At the same time, the fruit of research at this level should permeate African language programmes at the lower levels of education.

v. Literature courses at all levels should emphasise its universality, as every community uses its language for creative purposes in the form of poetry, drama, and prose. This will correct the current image of literature as something strictly European. It will also lay a better foundation for literary sensitivity where literature is studied in English or French.

vi. Writings on African indigenous education are scattered all over the continent, and particularly in Institutes of African Studies in other parts of the world.

The time has now come for some agency to sponsor an encyclopedia of such writings with a well written preface on the underlying philosophy, curricula, and teaching methods and materials that run through educational practices in various African societies. This will become a source material for teacher training. It will also help us realise the extent to which the so-called modern approaches to education are not very new, and certainly not alien to our culture.

vii. There has to be some dynamism in the teaching of the human and the natural sciences, the technical subjects, the recreative, creative, and performing arts in African schools. Beginning from the higher institutions, we should explore innovative methods and materials for teaching these subjects. We must get the fruits of recent research in these areas into textbooks and other teaching-learning materials. As much as possible, we should involve the actual practitioners of these subjects in programming and teaching them in schools.

viii. Programmes in technological courses should emphasise (a) a good grounding in the indigenous technology of each locality, (b) the extent to which these can be improved upon (not totally replaced) by "imported", "transferred", "borrowed", or "stolen", technology, and (c) creativity. This is with a view to ensuring that school-taught technology has a hand in helping the African tame his environment.

ix. African traditional religion (subjected to unbiased interpretations) should be given due prominence in school programmes. As much as possible, parallels should be drawn between African religious tenets and those of Islam and hristianity. This is not with a view to converting young Africans to their religion (they are in fact still part of it) but to make them realise the complementarity of various religious belief systems.

x. Programmes of teacher education, at all levels, should become more relevant by (a) attracting to and retaining our gifted persons in teaching, (b) ensuring a good level of general education for the teacher, (c) encouraging and rewarding resourcefulness and innovativeness in teachers, (d) making teacher training (especially at the higher levels) as practical as possible, (e) reducing the number of non-professionals functioning as teachers in schools, and (f) evolving more coordinated, and more relevant, continuing education programmes for teachers.

xi. Current efforts at producing educational materials locally should be intensified. At the tertiary level, training workshops will be necessary in this area. If more relevant materials are used for teaching at higher levels of education (and if teachers at that level become more resourceful) education at the lower levels is likely to be "infected" in the positive sense of the term.

xii. Above all, there is need to intensify inter-African cooperation in all areas of education. There are useful experiments geared towards making programmes of education more relevant in all corners of Africa. Africans need to go beyond merely presenting these at conferences. Such experiments will need to be studied on the spot by persons from other parts of Africa.

REFERENCES

1. Adapted from OBANYA, P. "Towards More Appropriate Psycho-Pedagogical Strategies for Educating the African Child", EDUCAFRICA November, 1979, 53-62.

2. OBANYA, P. "Les Problèmes de la Coopération Interafricaine en Matière d'Education" public lecture delivered in BASE, Kisangani 22.10.80.

3. OBANYA, P. Teaching and Cheating Inaugural Lecture, University of Ibadan, 20.4.82.

4. OBANYA, P. "Nigerian Teachers' Views on the Functions of English as a Language of Verbal Interaction in the Upper Primary School" in Ubahakwe (ed). Varieties and Functions of English in Nigeria, African Universities Press 1979, 242-256.

5. MACAULEY,J.I. The Effect of Language of Instruction on Selected Learning Processes and Outcomes - Unpublished Ph.D. thesis, University of Ibadan,1982.

6. AKE,C. Social Science as Imperialism, Ibadan University Press, 1980

7. OBANYA, P. Towards a Marriage of Traditional and Modern Education in Africa. Unesco/BREDA Seminar on Educational Goals and Theories in Africa, Dakar,1978.

The problem of the relevance of African school and university curricula

SYNTHESIS OF THE WORKING GROUPS (A,B,C,D)

I. Analysis of the problems

Group A shows by a brief historical account that the lack of relevance of African school curricula has its roots in the education dispensed during the colonial and post-colonial period. Its content and objectives were in no way suited to the needs of Africa, of its culture, but to the requirements of the colonizer, turning out a "man of thought" and not a "man of action". Groups A, B, C, D all recognise that school curricula are maladjusted and are the cause of unemployment and of school failures. On becoming dependent, many African countries retained the existing school structures with heavy and encyclopaedical syllabi, transmitting foreign values. In the view of group C, those curricula were drawn up in such a way as to have the effect of eliminating their users. In fact, Africa has not succeeded in rapidly achieving a balance between "intellectual disciplines", "disciplines of the heart" and "manual disciplines" (group A) and these three essential are not taught at all levels with equal importance (group D). Group B underlines the excessively theoretical content of university education.

II. Proposals for more relevant curricula

All the groups concur in regard to the following orientations designed to ensure the relevance of African school curricula.

1. School curricula should be backed by an education philosophy, and political discourse should define the kind of society to be aimed at, the citizen profile to be developed to that end, as well as the profile of the teacher concerned. Accordingly, specific objectives must be defined at each education level, as well as the means for attaining them. This education philosophy should be taught and seriously commented on in teacher-training establishments.

2. If curricula are to be relevant, they must not be drawn up in a manner that one could liken to "stitching the garment together in the client's absence". The "clients" who should be present are the teachers - immediate transmittors of curricula (their views should be ascertained, preferably through their trade-uions) - and the labour market. It is important to take account of the concerns of local economic agents.

3. School must be a motive force for collective development: decolonising it means first of all decolonising mentalities by rehabilitating manual work. Curricula must prepare children for contributing to promotion of agriculture, animal husbandry, handicrafts... They must reflect labour needs, assign an important role to agriculture so that students can participate actively in national development. Their content must be precise, flexible, adapted and drawn up in relation with specific targets tailored to the environment. All the persons concerned must be involved in curriculum development - intellectuals, teachers, parents and the community. Community education should be promoted by making the community participate and by encouraging teachers.

4. Higher education

(a) Autonomy of teachers, departments and faculties often leads to the development of generalisation that do not take account of local realities. Harmony must be achieved as between theory and practice.

(b) Real collaboration must be encouraged between the university, training schools and institutes preparing didactic material.

(c) Research must be adapted to reality, and in this area the university must play its full role. The State should intervene to encourage research, endorse it and ensure that the results are put into application. To solve the problem of unduly theoretical higher education, the system of in-service training should be developed.

5. Technical education must not be neglected, and existing schools must be equipped with adequate material. University must train people in techniques and know-how useful for the country's development. An engineer must not only be capable of assembling a car, he must also be able to manufacture it.

6 Teacher training must take account of the new responsibilities of teaching staff. Courses on teaching methods must be offered at university.

7. Cooperation with other countries in regard to education must be continued, but it is absolutely necessary that African education be founded on firm basis in order to promote new forms of education adapted to the realities of the African continent.

Address by M. Metou Nkoum Daniel
President of the Cameroon League
at the Opening Ceremony

It is a pleasure and an honour for me to address you at this opening session of the Pan-African Conference on Education organized by the World Confereration of Organizations of the Teaching Profession with the cooperation of the Government of the Republic of Cameroon, the Pan-African Organization of the Teaching Profession and the Cameroon League for Teaching, Education and Popular Culture, on behalf of which latter organization I thank you for responding so massively to our invitation.

I am all the more pleased because this meeting, taking place, as it is, on Cameroonian soil and constituting a synthesis of the meetings held in Kampala for English-speaking African countries and in Niamey for French-speaking African countries, is an honour for us in the sense that it highlights the bilingual and multicultural nature of our country which is a land of diversities since it is Africa in miniature and possesses most of the ecological features of the African continent.

While thanking the World Confederation of Organization of the Teaching Profession for this very meaningful choice, I also have to thank the Government of the Republic of Cameroon for enabling us to translate the choice into facts, as you can all see, because of which it has been made possible for me to wish our guests a hearty welcome and pleasant stay on Cameroonian soil.

The Cameroon League for Teaching, Education and Popular Culture is pleased for having been involved in the organization of this great meeting of experts in education which, throughout its duration, will be an ideal forum for reflexion on a subject which we consider of special importance for the better future of our educational systems which are still problematic, namely "What should the African School be in the Year 2000?"

Is there a more relevant question in a field so essential to the development of our countries which are engaged, as someone said, in a "race between education and catastrophe", in a world where, more than ever before, whoever does not advance retreats and where the future is knocking most persistently on our doors? That is why we cannot but thank all those who have contributed in one way or the other to the organization of this Conference, in particular, the World Confederation of Organizations of the Teaching Profession, which has a brilliant record of support for education in Africa and the world, the All Africa Teachers' Organization whose sphere of influence keeps expanding and the stock of whose activities has been enriched by this *Conference; the Unesco which has proved, through its* contribution, that it is interested in all matters of education, science and culture; and, most especially, the Government of the Republic of Cameroon which, in accepting to host this Conference, has shown the interest it has in the problems of education which it considers as "the priority of priorities".

Distinguished Representatives of International Organizations, Governments of African countries and Organizations of the Teaching Profession, your presence in Yaounde is a testimony that in this era of ours when all the countries of the world are condemned to interdependence and when solidarity is increasingly considered a duty, the preparation of solutions for the challenges of the future calls for international cooperation through which we are becoming citizens of the world. Therefore, you should feel at home on Cameroonian soil where you can combine the pleasant and the useful so that

Long may live International Cooperation!
Long may live African Unity!
Long may live Cameroon!

Adress by Dr. Joseph O. Itotoh
President of the All Africa Teachers' Organization
at the Opening Ceremony

I bring you all very warm greetings from the All Africa Teachers' Organization (AATO) and welcome you to this historic and all-important Conference on education, on African education, on African soil.

The All Africa Teachers' Organization is a Confederation of Teachers' Organization that is authentically Pan African in conception, orientation and operation whose centre piece policy is education for Africa. Some of the teacher organization memberships are both professional and sometimes trade union in orientation within the context of their various national operational framework. We do not have any intervention roles in the internal structures of our members. We are non-political in orientation. I must say, however, that education per se by its nature is a political instrument for the development of the people for whom it is dispersed from the bondages of ignorance, disease, squalor, poverty, underdevelopment, and neo-colonialism in whatever shades of colours it is now being manifested in contemporary world situations. This has been said to all the fears of all those countries who feel uncertain as to whether affiliation in operational dimensions to the AATO is not synonymous with putting their hands and feet into some kind of unkown shackles that could lead to a new form of bondage.

The All Africa Teachers' Organization's activities are therefore aimed at fraternisation with all and sundry organizations that have the right and transparently honest goodwill towards Africa. This policy offers us the base on which to encourage and foster international and national cooperations to pursue educational programmes that are genuinely instrumental and contributary to the realisation of effective, functional and authentically development oriented education for Africa to engender internal resource, economic and social development for her people. This is why the All Africa Teachers' Organization pays tribute of gratitude and appreciation to the Unesco, CTF, DDA and SPR of Switzerland, FIPESO, IFTA, LO/TCO and the WCOTP for their various and varying degrees of cooperation that is hereby being concretised in the realisation of this Pan-African Conference on Education here in Yaoundé. We thank all of them and more particularly the Republic of Cameroon for its wonderful magnanimity in playing host to this Conference and providing many other diverse assistance to make this dream a reality.

Mr. Chairman, distinguished ladies and gentlemen, it is no longer news that Africa has for too long, perhaps erroneously been regarded as a dark continent with all its connotations; that we had inherited colonial systems of education that are ill-suited for our needs and that Africa needs a new system of education that can lead the continent from dependence to true independence economically, technologically, politically and socially. For over half a century, this story has been told by the imperialists, colonialists, nationalists, Africanists and even the Unesco. What we need now is action. Action that is African based in conception and orientation, realisable within the context of African means and the methods and strategies to be adopted by African resource persons drawn from within the internal resource strengths of Africa. We need in a nutshell, strategies and modalities for implementation of a suitable system of education that can truly, realistically and effectively launch Africa on the path of self-reliance. Indeed this need is not just for the year 2000 but from now on.

It is this kind of solution to the African educational problem that we expect to result from this Conference.

It is pertinent to mention here, even at the risk of unsavoury repetition, that education is an instrument par excellence for soundly based development of any nation. We cannot run away from this. It however does appear to the All Africa Teachers' Organization that even if most African Governments realised and indeed recognised this many decades back, that evidence does show that they do not prosecute education with that kind of resolute determination to use education to achieve development. Shedding crocodile tears and going cap-in-hand seeking Greek-horse aid cannot help in this matter. We need to be convinced and apply our meagre resources of both men and material towards this end. I would therefore appeal very strongly to all Governments in Africa to wake up and take the problems of African development by the horns even at the expense of grandiose and prestige projects that appear to be the craze of the time. Only Africa, standfast and convinced, can save Africa from the symptoms and ills of underdevelopment.

Mr. Chairman, ladies and gentlemen, I cannot fail to mention in this brief address the problem of high level talks on educational policies and planning that have all along failed to take the teachers - the ultimate executors of educational programmes - into confidence. I made this observation at the Harare Conference of Ministers of Education and those responsible for Economic Planning. I can only hope that the message sank into appropriate ears. Whether this message was well taken or not, it is relevant to emphasise that if results are to be achieved in educational programmes, all governments must involve teachers at all stages of educational policy formulation, planning and execution. This is as it should be and indeed, it is the only realistic way out. It is obvious that most of the non-practising educationists who have styled themselves educational policy formulation and planning specialists are currently alien to the real action in the classrooms. Indeed they do not really have high stakes in the education industry. The teachers are the key educational personnel who have much to lose if education fails in achieving its objectives because it is their business and they have no other business but education. They owe it as a duty to themselves and their profession to pay maximum attention, involvement and commitment to the professional education industry, the only professional industry they have in which they can find self-fulfilment and self-actualisation. They must be involved by the governments in all aspects of it in order to facilitate the achievement of expectations.

Permit me, Mr. Chairman, to say here that I have the mandate of the Organization of African Trade Union Unity (OATUU) to wish this Conference successful deliberations. Comrade Akumu, the Secretary General of OATUU wants the Conference informed that he is unable to be personally present to deliver a message of goodwill due to circumstances beyond his control. As you may have known, the AATO is the educational arm of OATUU. This would therefore make it clear that the OATUU is one in thought with all the well meaning African governments and organizations as well as other international non-governmental organizations that are staking various levels of aid to run this programme.

I would like to conclude Mr. Chairman by saying that the hope of a functionally useful education system for Africa in the year 2000 expects to get a great fillip from the outcome of this Conference and so do the teachers of Africa. May the best result from this Conference therefore be to meet hopes and aspirations of the African continent in this regard.

Long live the Continent of Africa!
Long live the Republic of Cameroon!
Long live AATO!
Long live International Cooperation!

Address by James W. Killeen
President of the World Confederation of Organizations of the Teaching Profession
at the Opening Ceremony

I am delighted to be here today to bring special greetings and good wishes from our organization, the World Confederation of Organizations of the Teaching Profession, from over 7 million members in 149 teachers' organizations in 95 countries. Our Executive Committee has just completed its annual meeting at headquarters in Morges, Switzerland and our Executive Committee member colleagues - Anne Allangba, Ambrose Adongo, Joseph Itotoh and Jean Petite would be pleased to discuss any and all matters relating to WCOTP with you. The Executive Committee and the staff join with me in extending our best wishes for a successful conference. The interest is very high, hopes for success and progress are even higher.

WCOTP continues to work as a non-aligned, non-partisan political force to promote the world-wide unity and solidarity of teachers in working for improved status and in working for improvement in the quality of education. We believe that these goals are inseparable. A free, democratic education can only be provided where/when teachers are free to teach, and the freedom of teachers to teach can only be maintained where teachers function democratically to protect and to improve the status of teachers.

WCOTP believes in action. It acts in four ways:

1. It presents an independent, non-aligned, teacher viewpoint to the major inter-governmental organizations, including the United Nations and its various agencies - Unesco (we are particularly interested in the current Unesco program "Education for All"), the International Labour Organization, the Organization for Economic Cooperation and Development, the Council of Europe and various other regional bodies, and also to major non-governmental organizations interested in education. It maintains continuous contact with such bodies, rather than merely making occasional declarations.

2. It works to build consensus among its members, recorded in a collection of clear, strong statements of policy, formally approved by Assemblies of Delegates and placed on public record, saying exactly where it stands on a wide range of matters of concern to teachers. It does not change its policies or its colours to suit its audience.

3. WCOTP works to defend the rights of teachers by intervening when requested to support those whose

rights are under attack, by organizing pressure from around the world in defence of the victims of repression, and by seeking redress through the International Labour Organization, Unesco and various United Nations agencies.

4. WCOTP works to strengthen the teacher union movement by training leaders at all levels in the techniques of organization and collective action and in the skills of leadership and management, by a continuous program of seminars and workshops to highlight educational issues, and by promoting bilateral and multilateral cooperation among its members.

WCOTP bases its work upon the joint ILO/Unesco Recommendation Concerning the Status of Teachers, the content and the text of which were largely shaped by WCOTP representatives. While pursuing the goal of total implementation of the Recommendation, and of subsequent Conventions and Covenants which affirm specific rights, WCOTP also strives to promote international understanding, peace and disarmament, justice and equality, and the elimination of all forms of discrimination. It works with complete openness, with full membership, and full disclosure of the sources and the use of all its funds.

I am also delighted to bring words of support from my own teachers' organization. Canadian Teachers' Federation (CTF), who is firmly committed to the ideals of WCOTP and as a result is pleased to be able to help sponsor (with money and manpower) WCOTP programming in Africa including this Yaounde Conference. (Dr. Itotoh earlier read the list of WCOTP member organizations and others who are assisting with this Conference).

CTF recognizes the importance of this meeting. If at all possible, CTF President Brian Shortall would have been here with us. President Shortall, Secretary General Stirling McDowell, and International Program Director Robert Barker (who many of you know), wish the greatest success for this meeting and look forward to reading the Conference report.

The Koran says: "if you do not know where you are going, any road will do".

The previous conferences in Harare, In Lagos, in Niamey, and in Kampala clearly indicate that Africans are trying to select and to prepare the road.

No one says it will be easy, but the obvious cooperation between teachers and our organizations with Ministries of Education is an obvious plus.

This Conference will help to illustrate the character of WCOTP which is a teachers' organization, convinced that in concerning itself with the interests of teachers that it must be attentive to the central interest, the interest of the teacher in providing children with the kind of education that will help them to build successful lives in the reality of their community and to contribute to the development of the community.

That is why commitment to the goal of democratization and to the continuous reform of education to ensure that it corresponds to present and (as far as we can predict them) future realities.

In Africa, we observe with lively sympathy the great efforts being made to escape from the inheritance of a colonial education system and to shape a school programme which will at one and the same time answer to the demands of a changing society moving towards increasing reliance on technology and to the need to conserve and enrich the traditional cultures of the African people. It is no mistake that the theme of the 1984 WCOTP Assembly to be held in Lomé, Togo in early August, is "The Role of Vocational and Technical Education in Human, Social and Economic Development".

WCOTP has worked and will continue to work to help African teacher efforts, always with emphasis on one principle. Our role is to help and support - not to impose anything, to facilitate the efforts of our African members, to find African answers to African problems, and not to impose any external model on a continent that has suffered too much from external interference.

WCOTP pledges its continued support to you as you (and we) work towards these goals. And finally - on a personal note.

I am delighted to be able to stay for the entire Conference - this is a splendid opportunity for a teacher. Some of you know that I teach in a secondary school in Vancouver, British Columbia, Canada, with 1500 young people who speak 46 languages amongst them, a kind of microcosm of multi-culturalism and multi-lingualism. I will observe this Conference with that background.

I am indeed looking forward to the deliberations and to meeting with many of you.

Address by Pierre Hele
Minister for Education of the Republic of Cameroon
at the Opening Ceremony

It is for me a real source of satisfaction and a great honour to have the duty of welcoming you today in this beautiful Conference Building of Yaounde. In the name of the Government of Cameroon and of its outstanding President Paul Biya, I welcome all of you who have accepted our invitation, thus enhancing, by your presence, the prestige of this inaugural meeting. It is with real pleasure that I greet the delegations from other brother African States who, by coming here, have brought us their encouragement and their experience on this solemn occasion. Honourable delegates from countries that are our brothers and friends, you can surely feel at home here.

It is with particular pleasure that I express my appreciation to the World Confederation of Organizations of the Teaching Profession (WCOTP) which chose Cameroon as the venue for this important international meeting of the education world - a meeting that, one may recall, follows on from the Kampala meeting in Uganda in 1980 for the English-speaking African countries and the Niamey meeting in Niger in 1981 for the French-speaking countries. Cameroon is a land for meeting, for dialogue, for democratic openmindness; it is a country situated in the heart of Africa, a real crossroad of African civilizations, a country where bilingualism - French and English - is a continuing happy and harmonious experience; as such, Cameroon offers an excellent framework for a meeting such as this which, I am convinced, will yield results beneficial and enriching for everyone. I should also like to take this opportunity to thank the World Confederation of Organizations of the Teaching Profession for the moral, technical and financial support that it is thus giving unceasingly to the African countries in the study of the problems they encounter in the field of education.

In the name of the Head of State, allow me to express our warm and sincere gratitude to Mr. James W. Killeen, President of the World Confederation of Organizations of the Teaching Profession, to his unflagging assistant responsible for relations with Africa, Mr. Kléber Viélot, who are both here, and to the other members of the secretariat.

I should like next to address our sincere thanks to the All Africa Teachers' Organization which has voluntarily associated itself with WCOTP to organize this important meeting in Cameroon. Its President, Dr. Josepth Itotoh and the delegation accompanying him can also feel at home in our country.

I should likewise express our very warm and very sincere gratitude to Unesco which has given moral, technical and financial support to WCOTP through the intermediary of our country, enabling this meeting to take place in optimum conditions and with the assurance of success.

Allow me to express our deep appreciation to Mr. Ndiaye, personal representative of the Director-General of Unesco, and to his colleagues present here who, notwithstanding their heavy and numerous tasks, have come to represent Unesco in person at his opening meeting and to take part in the work of the Conference. May I ask Mr. Ndiaye kindly to convey to the Director-General of Unesco, Mr. Amadou Mahtar M'Bow, our cordial greetings and assure him once more of our friendship.

Lastly, our very warm thanks to the "Ligue Camerounaise de l'Enseignement, de l'Education et de la Culture Populaire" which has associated itself with WCOTP to organize this conference, thus showing once more its firm determination to support, as in the past, the action of the public authorities in the field of education.

Before concluding this part of my speech, I should also like to express our very sincere thanks to all the persons who have contributed directly or indirectly to the holding of this meeting: I have particularly in mind my fellow-countrymen in the various ministries and national bodies who have spared no effort to ensure optimum conditions for this Conference.

All this cooperation has made it possible to bring together all the eminent persons present today. One can hope, therefore, that the deliberations of so many education experts meeting in the Conference Building of Yaounde over five days will determine the guidelines for a school policy suited to the requirements of the African countries. Certain topics included in your agenda (present status of democratisation and generalisation of education in Africa; problem of the relevance of university and school curricula in Africa; role of the teaching of science and technology in the African school, to mention only some of them) are already familiar to you and you will be able to examine them advisedly. It should indeed be possible to establish the profile of the school that Africa needs for the year of 2000.

By way of my own modest contribution to this opening meeting, I should like to present a few reflections and remarks regarding the theme of your conference, in my capacity as an African, a parent of pupils, and as the present Minister for Education of Cameroon. It is not my intention to introduce this theme by a technical presentation followed by discussion - Mr. N'Diaye will be doing that later, being outstandingly qualified having regard to his competence, the position he holds and his experience in the field of education.

Before imagining or describing the African school of the year 2000, giving it substance, planning curricula, defining its methods and procedures, determining the kind of person we hope to see emerging from that school and perhaps imagining the kind of teacher it will need, it seems to me appropriate - and this is where my remarks on the theme begin - to characterize Africa of the year 2000, to try to forecast its needs, to put into perspective because any real and valid education must take account of those first fundamental data if it is to be effective.

In actual fact, Africa of the year 2000 is already very close, only 15 years ahead. Without exaggeration, we can say that we can already perceive it in Africa of today projected into a more or less distant future according to the rules of normal evolution. Without undue pessimism, we must recognize that the countries of Africa, in particular those of black Africa, are among the poor countries beset by famine, disease, illiteracy and rapid population growth.

Today, Africa is no longer an isolated continent, it is open to the world thanks to the various communication media, and accordingly is open to the dissemination of universal knowledge.

The time factor is affecting our societies to an increasing extent, disrupting our habits and behavioural patterns and imposing a hectic way of life on us. Everything is changing around us: we are constantly having to adjust to all these dizzying movements if we are not to be overtaken and crushed by the speed of developments. Africa can no longer live without any notion of time, heedless of tomorrow.

Poverty in all its forms, rapid evolution of the world under pressure of time and speed, dissemination of universal knowledge, openig - up to the world - those are the essential characteristics of our societies in general and of Africa today in particular. Africa of the year 2000 is this Africa projected into the future, this Africa whose positive points and negative points will be the subject of coefficients of improvement or of gravity, according to the case and depending on vigour or slackening-off in the fight against under-development.

It is therefore on the basis of these realistic data that the Africa school of the year 2000 will have to be built.

Africa is an under-developed continent and it still will be in the year 2000. The principal objective of the African school of the year 2000 must therefore be to seek solutions to the problems of under-development in all its forms. Already in the developed countries, school is at the service of development and is even a factor of development; this it will have to be in Africa, to an even greater extent. In order to fulfil its vocation, however, the African school must be open to all because a country's development is everyone's business. It must prepare all the children to become citizens, craftsmen of economic development and social progress. It is the school that must also prepare children for adjusting to the life that awaits them, that must teach the African school-child to observe the environment, to know it in order to transform it in the perspective of better living and well-being.

School implies clearly-defined aims and objectives with a view to achieveing the kind of society and the kind of person that one wants; it implies curricula and methods - in short, pegagogy to be applied. But one cannot speak of school without speaking of the teacher who animates it, for it remains true that even the best institutions are worth no more than the people whose task it is to animate them.

For the African school just as for any other school, there must be well-trained, well-qualified and sufficiently numerous teachers, since the quality of education depends on them.

Unfortunately, one is very often short of the targets in this area.

The pupil-teacher ratio of 50, the target in the education plans of many African countries, has not been achieved, whereas in industrialzed countries such as France, a ratio of more than 25 pupils is a subject of discontent and protest on the part of the teachers' and parents' organizations.

Nevertheless, we must recognize with pride that since the African States acquired independence, they have made many efforts and many sacrifices in order to improve the school system by adapting them to the realities of Africa. Their action has been at all levels: political will to act in concert, to provide education for all children, to promote school reforms; expansion of education budgets for functioning, school construction and equipment, training of teaching staff; management of resources as reflected in education plans, etc.

The African States are well aware of the essential importance of education which is central to everything. Education, is a sure, productive investment. That is why Raymond Aron, pedagogist and economist, could say that "What makes the difference between the developed countries and the under-developed countries is that the former are more higly educated".

Education therefore remains the top priority for the African leaders and the subject of constant efforts. To convince ourselves of this, we can take an example, that of Cameroon. In this country we note with satisfaction that education is the first concern of the public authorities in the various areas, and some of the results achieved are encouraging. Our Head of State, Mr. Paul Biya, in his opening addres to the Vth National Council of the UNC, underlined once again the importance and the high price he attaches of the education sector, saying: "As regards national education, whose resources are constantly being increased and adjusted in proportion to population growth and, correlatively, school numbers, reforms are being carried through in respect of policies and structures and a great deal has been achieved... The success of our efforts in favour of education is clearly visible, reflected in the constant increase in the school attendance rate and in the fact that almost all the personnel needed for the promotion of development can be trained within the country, placing Cameroon in the forefront in the fight to overcome illiteracy and cultural under-development".

The people of Cameroon, an adult nation, have recognized that "to vote for Paul Biya is to vote for the consolidation of a school of Cameroon respectful of our positive traditional values and of the principles of pluriculturalism and bilingualism, and capable of generating progress and technology in our society".

Cameroon is sparing no effort for education. The education budget is developing constantly: by way of indication and as regards the two most recent financial years, it was 49 billion out of a total budget of 410 billion in 1982/83, increasing to 66 billion out of a total budget of 520 billion in 1983/84.

For the five-year period 1981 to 1986, 202 billion francs are being earmarked for various activities in the area of education.

The World Confederation of Organizations of the Teaching Profession (WCOTP) has as its objective to ensure equal opportunities through education, to improve the quality of education, to defend the individual and collective freedoms of teachers, to defend freedom in the policy and determination of curricula and in the organizational methods of teaching, to promote international understanding as well as peace and solidarity of teachers at the national level.

In addition to mentioning these objectives of the World Confederation of Organizations of the Teaching Profession, I should like to take this opportunity to urge you to support the actions of governments in their efforts to promote better education. While being proposing forces, you must make yourselves available to the political will of your respective countries for the implementation of government programmes. In addition, it will be your task to convince natural and legal persons of the irreplaceable role of education and to overcome the stumbling-blocks of all kinds that stand in the way of its promotion.

You are being invited to construct, to build a school for Africa of the year 2000. It is an exalting task, but at the same time a different and delicate one that will require from you a great deal of imagination, spirit of prospection, intelligence, realism and courage. But I can rely on you, because I am well aware of the faith that inspires you for carrying out this mission, your competence and your experience, and I am convinced that over these five days of arduous work, a detailed, constructive and beneficial outcome will emerge from your deliberations and will be able to help the African countries that are searching for new ways for achieving a better living environment for their peoples through education.

It is in this climate of resolve, reciprocal confidence, inter-African and international concertation that I declare open the work of the Pan-African Conference on Education here at Yaounde.

Address by Cheick Sadibou Diagne (Mali)
Representing the Trade Unions of the Teaching Profession
Closing Remarks

After having represented the trade unions of the teaching profession at the African Conference on Education at Niamey in August 1981, I am once more honoured to carry out this noble mission at the closing ceremony of this historical meeting at Yaounde which has had as its theme "What school for Africa in the year 2000?".

Allow me to express my heartful thanks to my colleagues who have vested in me their confidence and their sympathy. I should like to extend our warm appreciation and gratitude to the Minister of Education of the Republic of Cameroon who, notwithstanding his many responsibilities, honoured us by attending the opening ceremony of this conference. That gesture was an eloquent illustration of the importance that the Government of Cameroon attaches to problems of the African school. This assembly of representatives of the African school will remain engraved in our memories for many years to come. May I ask the Deputy Minister for Education to convey to the Government and to its illustrious Head, His Excellency Paul Biya, our deep appreciation for the generous hospitality that has been extended to us in this beautiful captital city of Yaounde.

The unflagging efforts of the Cameroonian League for Education and National Culture and of the organisers have not been unavailing, for our work has proceeded in excellent conditions, in a climate of frank collaboration, in an environment of comradeship. Our success is largely thanks to those efforts. On behalf of all of us here, I should like to express to the President of the World Confederation of Organizations of the Teaching Profession our appreciation for the aid received from that organisation which you direct with such competence and clearsightedness. The close attention you pay to our work reflects the interest that you attach to the very numerous and difficult problems of the African school. Our gratitudes goes also to the President of the All Africa Organisation of the Teaching Profession for his untiring efforts to promote education in Africa and secure the well-being of teachers. By associating yourself closely with WCOTP for the organisation of this Conference, you have once again demonstrated your determination to make the African school one in which education and training contact should be established between the family, the society and the school institution itself. Our warm thanks to the representative of the Director-General of Unesco whose masterly address has been highly appreciated.

Honourable invited guests and participants, I would be failing in my duties as representative of trade-unions of the teaching profession here if I omitted to express our thanks to all the lecturers we have heard. Their presentations have been made with competence, clarity and patience. They have replied to the best of their ability to a great many questions, some of them delicate, I might even say impassioned. Thanks to them, the climate has been democratic, and this has certainly put the listeners at ease.

We express warm and sincere thanks to the administration of this Conference Building, to the charming hostess and the devoted guides for the welcome and the services rendered during our well-deserved coffee breaks. Thank you all, government and trade union colleagues for having listened so attentively to the speeches on carefully selected themes reflecting our constant concerns in favour of the African school in the year 2000, a horizon full of promise. Caring for the same problems, trade unions and government representatives have collaborated closely in seeking effective solutions for implementation of the Recommendations made at Lagos, Kampala, Harare and Niamey. This accounts for our great appreciation of the initiatives launched by the World Confederation of Organizations of the Teaching Profession (WCOTP) and other organisations and who have spared no effort to ensure that all the parties I have mentioned can move on to concerted action.

You will remember the statement made at the All African Conference on Education at Niamey in August 1981: "Yes, the African school must be changed". Our discussions here have resulted in concrete proposals and a comprehensive report and have established a precedent in Africa.

Here at Yaounde we have pinpointed strategies, proposed solutions, made Recommendations and drawn up a comprehensive report in preparation for the African school in the year 2000.

Honourable invited guests, colleagues, in the light of the conduct and results of our work here, I feel grounds for hoping that the school for Africa in the year 2000 will contribute effectively to training of the individual to serve development needs. This training will enhance the individual person's ability to adjust to change, will give him the will and the possibility to participate in it while respecting his own personality. This new school will aim to develop ability to promote and ensure technical, economic and cultural progress, always in the light of the specific values of the environment - whether by preserving them or by adjusting them. The content of the training syllabus will be determined by development targets fixed in relation with national political options. Society must develop as a whole, and consequently training in the year 2000 will develop a mentality of collective promotion having the school as a permanent agent and powerful motive force.

The African school in the year 2000 will form an integral, harmonized part of society. It will contribute knowledge, intellectual, civic and moral training. The African school in the year 2000 will be one of the training institutions offering its services to all communities. There will be no frontier, no harmful barrier between it and the environment. School - the new school in the year 2000 - will be an integral part of the environment, and the latter will organise itself to ensure proper functioning of this public service while observing limits defined by the State. This implies observance of the techniques implemented by educators, taking into account that in utilizing its own training facilities, the school will take into consideration the contributions of the environment to educating young people. The African school in the year 2000 will form an harmonious whole. There will be no rigid barriers between the various school subjects, but on the contrary there will be interaction at the level on curriculum content and progress. This new school will be at the service of everyone and will focus on productive work, will narrow the gap between intellectual work and manual work, the difference between town and country. School seen in this perspective will be the privileged structure for learning to master change. In addition, it will enable pupils to acquire means for defining and implementing new models for society, constructed through joint action by all generations and by the various communities. For that, the African school in the year 2000 will develop a child's ability to inform himself, to know his environment and merge into it. Children will be able to obtain information from all the traditional institutions as well as from those established to promote evolution, and will be trained to communicate that information and given the necessary facilities to do so.

Before concluding, I should like to add with deep conviction that the African school in the year 2000, whose outline has been defined by the meetings at Lagos, Harare, Kampala and Niamey, will be that of collective promotion, with education and community production brought together in a single unit. To achieve this, we must inform, educate, develop responsibility and conscience on the part of all energies and well-disposed persons in order to find the human, material and financial resources for any successful outcome. First and foremost let us rely on our own forces, external aid being only an auxiliary resource.

Lastly, the African school in the year 2000 means neither the school of our dreams nor that of our ancestors. It is one more stage in a difficult but rewarding process that will enable us to improve our living and working conditions.

Comrades in trade unions, you have an exalting task in this struggle, a front-line role to play. Be assured that, acting with the faith of the builder of major human undertakings, we shall attain our noble objectives.

I wish you all a safe return home. Thank you for having given me your attention.

Long live the Republic of Cameroon!
Long live WCOTP in the service of the African school!
Long live the All African Organisation of the Teaching Profession!

Address by Dr. J.O. Itotoh
President of All Africa Teachers Organization (AATO)
Closing Remarks

This conference was officially opened on the 2nd of April, 1984 to deliberate on what the African school should be in the year of 2000. The plan was to have it concluded on the 6th of April, 1984. But today is the 9th of April, 1984 some three days after the scheduled date for this closing ceremony. By this, we have overshot our estimated timing by about 30% as a result of unforeseen circumstances beyond the control of the conference and the government of the Republic of the Cameroon. This is a true reflection of what happens to a good number of issues in the African experience, particularly education. Are we any longer in doubt as to why perhaps our educational plans, indeed as many other plans in Africa, turn out to be unreliable? Many serious unanticipated events intervene negatively in well thought out programmes at various stages of planning and execution. The problems of Africa sometimes defy scheduled solutions and statistical projections. Our succes therefore must be in our ability to adapt to emergent circumstances. You have all demonstrated beyond doubt that you, as educators, are very well in command of a good measure of circumstantial adaptability. This is important. We must continue to exercise this attribute in our work situations.

I would like to seize this opportunity to congratulate his Excellency Mr. Paul Biya, the President of the Republic of the Cameroon, his government and the entire people of the Cameroon for successfully putting down an armed insurrection aimed at overthrowing the government. The speed and precision with which, what would have been an ugly situation, was brought under control is commendable. I would also like to commend the evident exercise of restraint, control and discretion in the operations that saved the populace from a holocaust. The participants at this conference will have good and lasting memories of how well we were taken care of and protected by the government both before and during the conference days and particularly during the days of anxiety and uncertainty. We are grateful.

I am told that we have had a very good conference which has achieved its set objectives admirably. This, in my opinion, has turned out to be a conference of historic significance. It is the first conference of educators in Africa that has brought together resprcsetatives of government and teacher unions from both the English- and French-speaking countries of Africa to discuss relevant issues in education. It is also significant in the sense that it has served as a forum for synthesising all the recommendations of the Kampala, Niamey and Harare Conferences on education organized by the

World Confederation of Organizations of the Teaching Profession (WCOTP)/All Africa Teachers Organization (AATO) and the Unesco respectively. This has now served the very useful purpose of mapping a synthesised blue print for action. It must also be emphasised that it has become clear from this conference that the erstwhile dichotomy between policy makers and executors in education in Africa is capable of being removed through a conference of minds because both parties have worked together so harmoniously at this conference to engender this view. I therefore plead with all of us, both government-functionaries and teachers' unions alike, to recognize this basic understanding that we are all working towards the achievement of the same goal. We cannot achieve this goal if we work at cross purposes. Let us accept that the recommendations and declarations arising from this conference signal to us as well, that we have all, here present, in various representative capacities, reached an accord to put all hands on deck to work together in harmony and understanding to achieve our educational goals for the good of our peoples and Africa as a whole. May this seed of understanding grow from strength to strength.

Let me conclude my remarks by expressing the appreciation and gratitude of the All Africa Teachers Organization and the World Confederation of Organizations of the Teaching Profession and all the other friendly international organizations which have contributed generously in various ways to make this conference the success it has turned out to be. Special mention must be made of and tribute paid to the government and people of the Republic of Cameroon for the great sacrifice they have made to host this conference whith all the material, financial, human and logistic support. Our thanks also go to all our colleagues of the LCE, Ministry of National Education representatives and all those who have serviced the conference in various ways and capacities. I have always referred to them as Mr. Felix Tsala team. They have all been wonderful.

I certainly cannot fail to thank Mr. Diagne of Unesco and Professor Pai Obanya of the University of Ibadan who delivered scholarly papers to the conference. I must say that Professor Obanya was invited to the conference as a guest-speaker in which capacity he delivered a very deeply researched intellectual paper that stirred the conference thought very relevantly. In addition, he made himself available very willingly as an unscheduled but vital resource person to the conference by helping in French and English and English and French translations. His help in the drafting of both the recommendations and declarations of conference is highly appreciated.

Chairperson, with the successful conclusion of this conference, you have in your position of the chair directed the affairs of conference fruitfully well. We are impressed and convinced that you have caught the substance and spirit of the conference. We are certain in our belief that when you meet your colleague Ministers of Education from other countries of Africa, you will not forget to tell them, with satisfaction, the joy of the success of this conference and indeed of the implicit accord reacherd here for teachers and governments to cooperate hands-in-glove in the execution of educational programmes in their various countries.

History has been made. Problems and issues in education for Africa have been identified, diagnosed, discussed, assessed, evaluated and solution projections have been made by way of recommendations and the Yaounde Declaration. What is left now is the generation of the will to implement them and implementation. This calls for dedication, commitment and purposeful action. I enjoin all of you to solemnly affirm that we shall give of our very best to achieve our set educational goals for Africa by the year 2000.

I would like to wish all of us God's speed and his travelling mercies as well as we depart to our various homes.

Long live the Republic of Cameroon!
Long live African Unity!
Long live All Africa Teachers Organization!
Long live the World Confederation of Organizations of the Teaching Profession!
Long live International Cooperation!

Your Excellencies, Distinguished Guests, my noble colleagues, ladies and gentlemen, thank you.

Address by James W. Killeen
President of the World Confederation of Organizations of the Teaching Profession
Closing Remarks

This conference has experienced excellent comments, excellent thoughts, excellent words and excellent ideas... stated formally and informally.

But what will count... what is most important... will be what happens when all participants return to their own countries.

I am reminded of a short poem:

I watch them tear
a building down,
a gang of men
in a busy town.
With a ho-heave-ho
and a lusty yell,
they swung the beam
and a sidewall fell.
I asked the foreman,
"Are these men skilled?
The kind you'd hire
if you had to build".
The foreman laughed
and said, "No, indeed!
Unskilled labour
is all I need.
These men can wreck
in a day or two,
what it would take a builder
a year to do".
I asked myself
as I went my way,
"Which of these roles
have I chose to play?
Am I a builder
with a plan?
Who does the very
best I can".
"Am I a builder
with loving care
who measures life
with rule and square.
Or am I a wrecker
who walks the town,
content with the job
of tearing down?"

It is much easier to be on the wrecking gang rather than the construction crew and it is my hope that - armed with our declaration and our recommendations - conference participants will go home to our countries prepared to be builders.

As a teacher, I have enjoyed the debate and the discussion... and have been sometimes amazed with regard to the similarities of many problems which can be identified on a world-wide basis.

We offer sincere congratulations and thanks to the government of the Republic of Cameroon for their splendid and continuing efforts on our behalf... in spite of very difficult circumstances.

We thank many other organizations which have offered moral and financial assistance. We thank our interpretation team. We thank the WCOTP Secretariat and the Cameroon staff.

And we express thanks for the Monday reception, the film and the cultural night as well as for the many other kindnesses offered by so many people.

WCOTP has worked and will continue to work to help African teacher efforts. We will always emphasize one principle. Our role is to help and to support - not to impose anything. Our role is to facilitate the efforts of our African members - to find African answers to African problems - and not - repeat not - to impose any external model on a continent that has suffered too much from external interference.

WCOTP pledges its continued support to you as you (and we) work towards those goals enunciated in the declaration and in the resolution produced by this Conference.

WCOTP/CMOPE

149 NATIONAL MEMBER ORGANIZATIONS
IN
95 COUNTRIES

The Confederation promotes a continuing exchange of professional knowledge and organizational experience among its members. In this way, it advances the cause of education and the status of teachers.

Accepted as the independent voice of the teaching profession at the world level, WCOTP seeks to play a major role in promoting closer links among all international teachers' organizations. In the same spirit WCOTP works for a strong unified teachers' organization in each nation or territory.

WCOTP serves as the expression at the world level of the spirit of solidarity of the teaching profession, providing material and moral support to teachers and their organizations facing crises, whether their cause be syndical, political or natural.

The Confederation fosters international understanding among educators and, through their work, among the wider public and thereby contributes to the promotion of a global community and world peace.